PERCEPTIONS ON CLINICAL TRAINING AMONG BACHELOR OF SCIENCE (IN-SERVICE) NURSING STUDENTS AT KENYA METHODIST UNIVERSITY, NAIROBI CAMPUS

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A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTERS OF SCIENCE IN NURSING EDUCATION OF KENYA METHODIST UNIVERSITY

DECLARATION

"This thesis is my original work and has not been presented for a degree or any other award in any other University."

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DEDICATION

I would like to dedicate my work to God, my husband, my mother, and my siblings for their continued love and support during my studies.

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I would like to thank the following people for the support given to me during my studies: God who has given me strength and good health during my studies has been an anchor to lean on when there was a challenge. Dr. Agnes Mutinda and Ms. Phidelis Kubende my thesis supervisors who provide guidance and mentorship. My husband, Domnic Marera who has supported me in my research work and provided guidance and support. To my family, my parents the late James Tuitoek and Pauline Tuitoek for supporting my studies and being my anchor, and my siblings Catherine Komen, Evans Kipkoros, Susan Rono, and Faith Kandie for the never-ending love support, and encouragement. My friends, classmates, and colleagues for continued support and encouragement

ABSTRACT

Nursing training involves a combination of theoretical and clinical training to build professional competence, master fundamental skills, and socialise in the nursing profession. Globally, nursing degree training institutions have increased, following the directive by the World Health Organization (WHO) to increase the proportion of nurses to a degree or higher level of training. Despite the increase in degree-nursing training globally, nursing graduates expressed the inability to apply theoretical knowledge to clinical practice, which has been attributed to various reasons such as student attitude, curriculum implementation, inadequate practise in simulated environments, and limited preceptorship-mentorship programs. Also, there is a paucity of information regarding student perceptions towards clinical placements among Bachelor of Science in-service nursing (RN-BScN) students. Thus, the purpose of this study was to explore the perceptions of clinical training among Bachelor of Science in-service nursing (RN-BScN) students. The study was conducted among RN-BScN students studying at Kenya Methodist University during the September-December trimester of the 2021/2022 academic year. A descriptive cross-sectional survey design was adopted where 115 students who met the eligibility criteria were identified through purposive sampling. Voluntary sampling was done among second-year students to participate in Focus Group Discussion. Data was collected through a self-administered questionnaire and a focus group discussion guide. Quantitative data was analysed by the use of SPSS version 26, where descriptive data was presented by the use of tables and figures. Multiple regression was done to test for associations between the independent and dependent variables, whereas content analysis was used to analyse qualitative data. Findings revealed that there was a significant relationship between students' perception of clinical training and clinical placement (p = 0.034), mentorship (p = 0.043) and supervision (p = 0.00). Moreover, 61.7% of the students were satisfied with the clinical placements as they provided a positive learning environment, while 84% reported they had the opportunity to transfer theory into practice. However, 58.3% were dissatisfied with the low use of evidence-based practise and 54.8% were dissatisfied with the minimal involvement of lecturers in clinical training as it was inadequate. The challenges experienced by the students during clinical training were: inadequate resources (30%), inadequate supervision (27%), curriculum challenges (18%), lack of support by hospital staff (15%), and personal challenges (10%). On areas for improving clinical training, respondents reported that there was a need for adequate supervision (58%), an improvement in the curriculum (32%), effective communication with the learning institution and the placement site (7%), and the provision of resources in the clinical area (2%). This study recommends the employment of more clinical instructors and the identification, recruiting, and training of mentors. For clinical placement sites, this study recommends more collaboration with the institutions and encourages the incorporation of evidence-based practise and critical thinking skills into nursing practise. Furthermore, this study recommends more studies be done among experts with the use of different data collection methods to avoid bias.

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ABBREVIATIONS AND ACRONYMS

RN – Registered Nurse

BSc N – Bachelor of Science Nursing

NCK – Nursing council of Kenya

KeMU – Kenya Methodist University

NACOSTI - National Commission for Science, Technology and Innovation

PPE – Personal Protective Equipment

EBP – Evidence-Based Practice

CLE - Clinical Learning Environment

FGD – Focus Group Discussion

GBV - Gender Based Violence

ICU – Intensive Care Unit

CHAPTER ONE

INTRODUCTION OF THE STUDY

1.1 Introduction

This study sought to investigate how Kenya Methodist University's RN-BSc nursing students perceived their clinical training. This chapter includes the study's background, problem statement, purpose, goals, research questions, justification, study limitations, and delimitations. It also includes assumptions and operational definitions of terms.

1.2 Background to the study

Theoretical and practical clinical training are both components of nursing education. Clinical training, on the other hand, is regarded as an essential component of nursing education and practice, as it assists nursing students in developing professional competence by applying theoretical knowledge to practise (Alshahrani et al., 2018), mastering fundamental clinical skills, and socialisation in the nursing profession (Rebeiro et al., 2020). The clinical environment, which is an interactive network of forces inside the clinical setting that influence clinical learning by students, is where clinical practical instruction takes place (Flott & Linden, 2016). Clinical training entails practising under supervision in clinical settings that have been approved, including teaching hospitals, private hospitals, clinics, community health centres, and specialty areas (Health Careers, 2017).

The students' clinical competence is developed through a large volume and variety of clinical experiences in an authentic clinical setting, where there is a provision for a supportive environment and the students should have self-directed learning (Mirzaei et al., 2020). Nursing teachers must improve clinical practise training to enable students to apply theory in practice, learn technical and interpersonal skills, and make appropriate clinical decisions in order to become oriented to the profession in terms of values and ethics, internalise their nursing roles, and provide students with opportunities to observe numerous clinical scenarios and use sophisticated medical equipment (Atakro et al., 2019). So, a good clinical environment is very important for nurses to learn and develop both basic and more advanced skills, which is how they improve their clinical competence (Tomietto, 2018).

A global phenomenon of clinical practise debated within nursing is the consistent evidence of an existing theory–practise gap (Farzi & Shahriari, 2018). The theory-practise gap is defined as a lack of ability to relate and apply knowledge gained via academic and research work to practise, whose effects render nurses vulnerable, hurting the health care system of any country in general (Greenway et al., 2019). This gap has also been reported in other studies where graduate nurses possessed information from textbooks and had the necessary clinical knowledge and psychomotor abilities, but they lacked the clinical reasoning abilities to provide safe, efficient care (Atakro et al., 2019). Furthermore, literature suggests that there is underutilization of the theory learnt in class owing to the fact that nurses might not always provide the care covered in class. Therefore, they are unable to consistently apply research findings to their daily nursing care (Curtis et al., 2017).

The complexity of learning environments does not always provide a positive learning opportunity; they also pose challenges to nursing students as they are erratic,

demanding, and always changing (Rezakhani et al., 2020) When entering the clinical setting for the first time, nursing students are confronted with a number of obstacles that impede their capacity to learn. It is difficult to maintain control of this situation due to the complexity of the environment and events involved. This setting has been cited as a reason for leaving or remaining in the nursing profession (Kalyani et al., 2019). From students' perspective, they perceive clinical settings as non-supportive due to institutional shortcomings; lack of interaction between students and clinical educators; and unfavourable attitudes and behaviours on the part of some nurse educators. They also said that preceptors did not interact with them or give them feedback (Amoo et al., 2022). The gaps identified may compromise patients' safety.

Numerous factors linked to this gap include insufficient or unavailability of nurse educators, clinical instructors, and mentors, an excessive number of students enrolled in the programme, an inadequate resources, student-related factors, and nurse-educator factors (Amoo et al., 2022; Blackman & Giles, 2017).

The impacts of the unpleasant clinical encounters on the students' learning are not only on trust and attitude; it also contributes to a lack of clinical competence, which compromises the patients' care among new graduates (Chan et al., 2018). Thus, there is a need to improve nursing training by continuously assessing existing situations and obtaining students' opinions and experiences of the knowledge translation process. Therefore, this study explored the RN-BScN students' perceptions on clinical training at Kenya Methodist University, Nairobi campus.

1.3 Statement of the problem

Nursing students benefit greatly from the opportunity to apply theory in clinical learning environments as they develop into competent, independent, and professional nurses. However, studies indicate that students who go through undergraduate training are unable to apply the theory taught to clinical practice (Ekstedt et al., 2019). There are varying and unquantified reasons as to why this gap exists. Some authors believe it may be attributed to students' attitudes, curriculum implementation, inadequate practise in simulated environments, and/or limitations on preceptorship-mentorship programs. Studies on clinical learning show a correlation between student satisfaction and performance (Kalyani et al., 2019). Learning may be hindered when students are dissatisfied with the clinical learning environment.

Against this background, there is also a paucity of information on students' perceptions on clinical training among the upgrading RN-BScN (in-service) students. Therefore, there is a need to explore the perceptions of clinical training among this group. The feedback provided by this group of students is critical because they have the experience of not only being students but also mentors in their respective places of work. Therefore, this study sought to explore RN-BSN students' perceptions on clinical training among the in-service students at Kenya Methodist University, Nairobi campus.

1.4 Purpose of the Study

The study sought to examine perceptions of RN-BScN students towards clinical training, explore challenges faced by the students during clinical placements and

identify ways of improving clinical practice. The findings will inform decisions for improving clinical training among the upgrading RN – BSN (in-service) students.

1.5 Objectives of the study

1.5.1 Broad Objective

To explore perceptions on clinical training among the upgrading Bachelor of Science (in-service) nursing students at Kenya Methodist University, Nairobi campus.

1.5.2 Specific objectives

The objectives of the study are to:

- Assess students' opinion towards clinical training among upgrading Bachelor
 of Science (in-service) students in clinical training at Kenya Methodist
 University, Nairobi campus.
- 2. Identify challenges faced by upgrading Bachelor of Science (in-service) nursing students in clinical training at Kenya Methodist University.
- Determine ways of improving clinical training among upgrading Bachelor of Science (in-service) nursing students at Kenya Methodist University in clinical placements.

1.6 Research questions

1. What are the upgrading Bachelor of Science (in-service) nursing students' opinions towards clinical training?

- 2. What are the challenges faced by the upgrading Bachelor of Science (inservice) nursing students in clinical training at Kenya Methodist University?
- 3. How can we improve clinical training among upgrading Bachelor of Science (in-service) nursing students at Kenya Methodist University?

1.7 Justification of the study

Students go through varied experiences while in clinical placements, which may either be positive or negative. Negative experiences have a high impact on students' learning outcomes. The RN-BScN students are a unique group whose clinical experiences are different as compared to the direct entry students. It is therefore important to understand their experiences and perceptions towards clinical training because this group had both experience as students and mentors while in their respective places at work. Thus, they provided vital information towards clinical training. Their feedback on clinical training gave insight on clinical placements, mentorship, supervision, and challenges affecting their learning. It also provided insights on how to improve and strengthen clinical teaching and learning.

1.8 Limitations of the study

This study was conducted among students who are currently studying at KeMU. Thus, this may have interfered with the student's level of honesty when responding to the research questions. However, to minimise these effects, the researcher assured students of their anonymity and confidentiality of the data obtained. Secondly, this study looked at a narrow population, the RN-BScN nursing students at KeMU, because of their

uniqueness as the students act as both students and mentors. However, a purposive sampling technique was employed to meet the target sample size estimate.

1.9 Delimitation of the study

The study was carried out in one institution, which may not be a representative sample due to different methods of teaching adopted in different institutions.

1.10 Significance of the study

The research findings will help nursing educators recognise the importance of their roles in assisting and guiding students toward clinical proficiency and to design strategies that are more effective in clinical training. These strategies will be shared with the Nursing Council of Kenya to develop policies that will help improve nursing training in the country. In addition, these findings will serve as a reference on how students perceive their clinical training. It will also inform the upgrading of the RN-BScN curriculum on clinical training.

1.11 Assumptions of the study

This study assumed that all the upgrading RN-BSN students went through standardised training when pursuing their diploma in nursing. Additionally, this study presumed that the views of the respondents were objective.

1.12 Operational definition of terms

Perception of clinical training – in this study, it refers to the nursing students' perspective and judgement regarding their clinical placement, supervision, and mentorship.

Regulatory body – is a person or an organization appointed by the Government to exercise independent regulatory function by setting rules and standards, conditions or restrictions, setting standards for activities, implementing and obtaining compliance

Nursing Council of Kenya - is a nursing regulatory organization created by Kenyan law's Nurses Act Cap 257 to guarantee the provision of safe and effective nursing and midwifery services.

Clinical teaching – teaching and learning that is patient-centred and closely related to patient care.

Clinical training – in terms of placement, supervision, and mentorship, the cumulative clinical experiences of upgrading nursing students.

Clinical learning environment – a setting where anybody has the chance to influence how patients are treated, a clinical learning environment can be found in a hospital, skills lab, community health centre, or social care facility.

Clinical placement learning – an arrangement in a clinical learning environment where nursing students build knowledge, skills and attitudes in providing nursing care, this provides a student's crucial learning experience.

Learning outcomes - statements that highlight important learning that students have acquired and may credibly demonstrate at the conclusion of a placement.

Clinical evaluation- placement assessment of clinical competence which is done by use tools designed to formally assess a student's performance which provides constructive feedback to the students.

Clinical supervision – In order to ensure safe and proper patient care while in the clinical learning setting, in this research, clinical supervision is a planned procedure of professional support for upgrading RN – BSc nursing students by the university lecturers and clinical instructors.

Clinical mentorship – guidance provided by the hospital staff during clinical placements

Preceptorship – An expert or specialist who teach and instruct students while in the clinical placement

RN-BSc Nursing students – these are students who are upgrading their studies from diploma level to degree level.

In-service students – these are students who are studying while working concurrently.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter explores literature about clinical teaching and training among nursing students on clinical placement, mentorship, and clinical supervision; the challenges they encounter; methods that can be adopted to improve clinical teaching; and the benefits of upgrading from a diploma-trained nurse to a degree nurse. The literature covers studies done globally, regionally, and nationally with a focus on clinical training.

Globally, countries have an accreditation body that regulates their nursing programs. In America, each state has a state nursing board that regulates nursing. This is not only in America but in most countries, such as Britain and Australia. In Africa, countries like Nigeria and South Africa have regulatory bodies that help to standardise and regulate nursing training (Ziba et al., 2021). Furthermore, there has been a growing commitment to nursing education. As a result, nursing schools in South Africa, Zambia, Lesotho, Malawi, and Congo have been supported with curricula reviews, infrastructure improvements in in-service training and faculty development, and growth in nursing education (Baker et al., 2021). In Kenya, nursing training is regulated by the Nursing Council of Kenya. The upgrading RN-BScN is a 3-year programme whose curriculum has both theoretical and clinical practicum. The standardised nursing curriculum is devoted to clinical training, which takes up around 50% of the total time allotted for nursing education (Farzi & Shahriari, 2018).

The standard of the clinical learning environment and the nursing students' perception of it during clinical placements are known to have an impact on nursing students' educational and professional socialising experiences, processes, and outcomes (Erlam et al., 2018). Their perceptions are varied. Some nursing students saw the clinical environment as stressful and difficult, while others thought the clinical education experiences were pleasant and rewarding (Pinehas et al., 2017).

In sub-Saharan Africa, the clinical learning experience has been constrained by logistics, lack of equipment, and poor supervision in the clinical training facilities (Amoo et al., 2022).

In Kenya, an evaluation of students' experiences in clinical placement reported that they had challenges in learning while in clinical learning environments due to a lack of mentors, overpopulation of students, and a negative attitude of staff (Mburu, 2015).

2.2 Clinical training

Clinical practice forms an important aspect of the nursing teaching-learning process as it helps build knowledge, skills, and attitudes and provides a venue where skills, knowledge, and attitudes gained are developed, applied, and integrated (Fukada, 2018). Furthermore, it plays a crucial role in preparing nursing students to become professionals and work as nurses, thus transferring knowledge gained in the classroom to real clinical situations (Allari & Farag, 2017; Kalyani et al., 2019). Clinical education helps nurses attain many of their educational goals, including critical thinking, acquiring nursing care skills, learning communication skills, and gaining skills in applying ethical concepts (Beiranvand et al., 2021). Due to this importance,

clinical placements are an irreplaceable component in nursing education which ensures fitness to practice as a nurse (Erlam et al., 2018).

Clinical training does not only help students develop the required skills and competence-practise clinical skills in a real-world scenario while observing how others deliver healthcare, but it also provides socialisation to the profession by providing an opportunity for students to apply their critical thinking abilities in real-world contexts and challenges provided in the clinical environment. In addition, they learn technical and interpersonal skills and make appropriate clinical judgments to become oriented to the profession in terms of values and ethics (Mirzaei et al., 2020). In addition, it helps students develop clinical decision-making and diagnostic thinking skills depending on clinical reasoning while enhancing their capacity for high-level thinking, such as critical thinking, creativity, reflection, and problem-solving (Sezer, 2018).

Teaching and learning components, organisational culture, physical space, interactional and psychosocial factors are the four elements of the clinical learning environment that have an impact on student learning experiences (Mahasneh et al., 2021). However, it is only beneficial when clinical experiences are well-structured and coordinated, the number of clinical hours in the clinical placement, the type and location of placement required for the experiences, student demonstration of competence, clinical supervisory and assessment criteria are all met (Spence et al., 2019).

Quality nursing practise can be promoted during clinical training by identifying and eliminating weaknesses in the nursing education curriculum (Fukada, 2018). The purpose of clinical education and assessment is to describe students' nursing abilities

in the performance of the required skill by ensuring the student meets the standards of quality and in the care of the environment, other healthcare professionals, and patient safety (Immonen et al., 2019). To identify whether a student has met the clinical placement objectives, clinical evaluation is done - the ability to judge a student's skills to a pre-established standard of patient care which not only focuses on competency but also behaviour, knowledge and attitudes (Sezer 2018). This plays an important role in developing a novice nurse into an expert nurse.

2.2.1 Clinical learning environment

Nursing education requires a conducive clinical learning environment, ample learning opportunities for students, and an ability to focus on student learning requirements (Ekstedt et al., 2019). According to Benner, individual nurses begin as novices and progress to become specialists through a process of skill acquisition. While theoretical knowledge is acquired in the classroom, skills are acquired in either a clinical skills laboratory or a clinical placement setting, depending on the student's level of study (Thomas & Kellgren, 2017).

Nursing educators should also note that a successful clinical experience does not only rely on the clinical instructor and students but also the clinical learning environment. Effective clinical placements are necessary to enable the application of theory to practice (Allari & Farag, 2017). Additionally, it should have an impact on nursing ability, knowledge, and professional development (Solvik & Struksnes, 2018). Providing a positive learning environment that will influence students' overall perception and ability to have meaningful clinical practise can only be achieved in an effective setting that helps the students become aware of their potential nursing roles

and helps them see the learning area as a stimulating and interesting environment (Allari & Farag, 2017). Therefore, the nurse educator's responsibility of defining the required criteria for an optimum clinical learning environment should be prioritised to identify beneficial placements (Kamphinda & Chilemba, 2019).

A good clinical environment is created through effective collaboration between the institution and medical personnel throughout the clinical placement. The responsibility of facilitating a good clinical learning environment that enables students to meet their objectives relies not only on the practise field but also on the educational institution (Struksnes et al., 2016). Bøe and Debesay (2021) say that to find a good clinical learning environment, the placement site should offer a meaningful learning situation and be evaluated to see if the learning goals can be met.

An environment that is dynamic and constantly changing is the clinical learning environment (CLE). The kind of supervisor, the standard of feedback offered to students, the context, and the students are just a few of the variables that can affect the CLE. A strong supervisor-student relationship results in an environment that is conducive to learning in the clinical setting. When nursing students work as a team and receive support for their decisions, they will always be driven to learn (Nordquist et al., 2019). The contentment of students with their learning activities is positively influenced by clinical learning environment components. Key factors in clinical environment satisfaction include the educational climate, ward manager leadership style, and supervisory relationship, (Putra et al., 2021).

Understanding the multiple factors that influence clinical learning quality in the CLE is critical. The fundamentals of a supportive social environment, educational

opportunities, peer interactions, excellent staff morale, interpersonal interactions and feedback, instruction, and effective interpersonal communication make up these multidimensional entities, (Kamphinda & Chilemba, 2019). However, other negative behaviours can impact negatively to students learning this is the professional behaviour of the clinical staff.

Nakagawa and Sasai (2021) indicated instances in which healthcare workers acted unprofessionally, such as demonstrating a lack of empathy or a casual attitude toward patients or students. These findings are incongruent with Weurlander et al. (2018), who not only discovered that "unprofessional behaviour" existed but also that these behaviours were accepted on a daily basis. These actions taken by medical personnel are a part of the clinical environment and they form part of the hidden curriculum in the eyes of students, influencing their learning. Moreover, students may feel powerless as a result of this, and there may be a disconnect between their idealised notions of healthcare and what they see in clinical placements (Rezakhani et al., 2020)

The satisfaction of nursing students with their learning environment and their relationship with their supervisors are mentioned as crucial characteristics that might be used to build and/or alter learning environments in clinical settings, (Ekstedt et al., 2019). The pedagogical atmosphere is crucial for students' learning activities and professional growth in the clinical setting. Therefore, establishing clinical learning settings that satisfy students' needs and expectations could benefit much from satisfaction, (Putra et al., 2021).

2.2.2 Students' perceptions on clinical learning environment

Individual students have varying interpretations of the clinical setting based on their experiences, resilience, and "life skills," with the desire to reduce vulnerability and foster a pleasant learning environment (Cooper et al., 2020). Students also struggle with finding their place on the team, defining their professional identity, and having doubts about their skills. As a result, most of them experience anxiety (Ulenaers et al., 2021). Clinical learning environments promote safe practises most effectively. Thus, nursing students should be involved in clinical learning environment activities and preceptors should use creative teaching techniques to accommodate each student's unique learning needs (Flott & Linden, 2016). The purpose of clinical education and assessment is to develop students' nursing ability in the performance of the required skill by ensuring the student meets standards of quality and safety in the care of patients, other health care workers, and the environment (Immonen et al., 2019).

The clinical environment has been characterised by students as being non-supportive due to organisational issues, poor interaction between students and preceptors, and the unfavourable attitudes and behaviours of preceptors. Students have also described learning inhibitors resulting from a lack of input and engagement from preceptors. Students observed that theory and practise were not always linked, that they lacked opportunities to reflect with their preceptors, and that those preceptors were not always personally involved or accessible (Ekstedt et al., 2019; Sweet & Broadbent, 2017).

Students further said that for clinical training to be successful, there should be: proper clinical supervision, learning in practical action, feelings in learning, involvement in learning, being familiar with task-oriented roles, being creative and exclusive in

learning, and so on (Butterworth, 2022). According to research done by Allari and Farag (2017) on nursing students' expectations regarding clinical training, the research findings identified the following expectations that help to promote effective clinical training: application of theory into practice; integration of theory into practice; improving clinical competencies and acquiring new skills; developing professional attributes and skills. Moreover, students added that to achieve desired clinical goals, clinical training should be done in a positive, motivating, safe environment.

The current clinical education system is not working well in imparting knowledge to students; thus, there is a need for changes in the education system. Students are expected to participate proactively during their clinical rotations. This clinical learning is enhanced in a supportive clinical environment with all facets of clinical practise covered by trained teachers who have professional communication with students to facilitate learning and socialisation into the profession (Brown & Sivahop, 2017). For effective learning to take place, there is a need to have positive clinical environments, competent clinical supervision, proper student assessment, and clinical-academic collaboration. These are all important themes in improving clinical nursing education (Ziba et al., 2021).

2.2.3 Clinical supervision and Mentorship

Clinical supervision is a procedure aided by a professional expert that aims to establish an environment in which participants can analyse, reflect on, and grow their clinical practise while also serving as guidance, feedback, and a system of support for each other in the clinical learning process (Kaphagawani & Useh, 2017; King et al., 2020). Furthermore, it is a structured process of reflection and review that usually takes place

between a more experienced nurse and a less experienced nurse and is used as a measure to increase compassionate patient care (McCutcheon et al., 2018).

Clinical supervision improves the integration of theory and practise, promotes personal and professional growth, offers support, and reduces errors, thereby ensuring patient safety (Kaphagawani & Useh, 2017). Moreover, young clinicians' professional ideals, identities, and competencies are fostered while veteran clinicians' stress and burnout are reduced and professional development opportunities are provided (King et al., 2020). This is supported by the World Health Organization, among others, as it recognises the necessity for clinical supervision education to be included in health professional education as a key strategy for improving patient safety and care (McCutcheon et al., 2018). It is significant to remember that clinical learning for students is a complex endeavour that necessitates close clinical supervision and assistance, as well as its associations with levels of cohesion, happiness, and task orientation. Furthermore, it should be multidimensional and should assist the student to meet the learning objective (Kamphinda & Chilemba, 2019).

An effective clinical learning experience should support students' learning, have quality mentorship and patient care, and students should be self-directed (Beiranvand et al., 2021). Limited access to resources and qualified nurses in clinical placements has led to limited clinical supervision and support of students, thus affecting the quality of care and guidance of students (Laugaland et al., 2021). Thus, for effective clinical learning and for students to fully utilise their learning potential, they should be attached to mentors in the clinical placements, as students experience many challenges in

clinical learning with limited access to qualified supervision and support (Chan et al., 2018).

It is crucial to make extensive use of it as a formal means of professional help for students majoring in nursing during clinical supervision. It assists nursing students in developing their professional competence and self-assurance, resulting in improved patient care (Muthathi et al., 2017). This ultimately helps students make the connection between what they learn in the classroom and the treatment of patients in a clinical setting (Donough & Heever, 2018). Additionally, clinical supervision improves students' well-being, attitudes toward professional development, the desire for lifelong learning, and the ability to be appropriately prepared for practice (Kaphagawani & Useh, 2017).

Clinical educators play a critical role in offering high-quality clinical education and putting abstract notions into practice. Thus, to successfully assist students in achieving learning objectives, qualified clinical educators must have a formal degree and must follow a set of guidelines. Beiranvand et al. (2021) asserts that clinical educators should have specialised curriculum development knowledge, assessment techniques, teaching strategies, as well as the ability to conduct research in science-related projects.

Although students must participate actively in their learning, preceptors and nurse educators in clinical settings are responsible for students' learning. In addition to supporting, motivating, problem-solving, and monitoring, nurse educators play a variety of supervisory roles (Ekstedt et al., 2019). Furthermore, preceptors should make the clinical learning environment permissive, to provide an opportunity for

students to integrate evidence-based information with scientific understanding to develop patient nursing care (Phuma-Ngaiyaye et al., 2017).

Lecturers at the institution also have clinical supervisory responsibilities to help clinical supervisors with their responsibilities (Donough & Heever, 2018). According to research, students' supervision boosted their motivation, strengthened their professional identity, and quickened the process of socialization (Rezakhani et al., 2020). However, additional research demonstrates that most students in clinical settings struggle to get assistance when they do, especially in clinically problematic situations. It impacts negatively on their ability to master clinical skills, as well as their motivation and attitude. Professional ethics has a big influence on how students' moral attitudes, ethical knowledge, and ethical performance are shaped and developed. Since it is known that the attitudes and professional qualities of clinical instructors have an effect on students' personalities, nursing educators must be cognizant of their moral obligation to exert significant influence on students. Since it is known that the attitudes and professional qualities of clinical instructors have an effect on students' personalities, nursing educators must be cognizant of their moral obligation to exert significant influence on students (Beiranvand et al., 2021).

Various facilitative and evaluative activities provide supervisors and supervisees with mutual benefits as part of this ongoing process to address this challenge. Moreover, research has found that peer learning has been shown to develop higher levels of perceived self-efficacy over traditional learning among students over time, (Pålsson et al., 2017). Clinical supervision enhances the clinical education environment since clinical supervisors watch over and physically oversee nursing students.

In addition, King et al. (2020) identified five "best" and "worst" aspects of clinical supervision. The best aspects of clinical supervision include formal supervision structure (including formalised feedback), students and supervisors being clear about assessment expectations, having a learning approach as opposed to a pass or fail approach, working with motivated students, and an interactive learning approach with constant communication as opposed to a teaching approach. Other findings indicate that the presence of a senior and junior supervisor helped students obtain a variety of viewpoints from their clinical experience (Mbakaya et al., 2020). Moreover, the worst experiences identified by King et al. (2020) are when a clinical supervisor fails a student and the university pushes for that student to pass, or when a supervisor does not know what a student can and cannot do.

Clinical teachers must be professionally motivated, possess knowledge and expertise, and possess strong communication skills to effectively shape the learning environment and help students meet their learning objectives (Allari & Farag, 2017). The World Health Organization (WHO) has consistently urged nursing educators to develop their abilities to provide top-notch instruction and produce competent and effective nurses who can accommodate the community healthcare needs, (Ross, 2020). Research suggests that communication skills, such as politeness with students, colleagues, and clients; clinical teaching skills; nursing competency; role modelling; and personality traits, are believed to be the most important aspects of training (Beiranvand et al., 2021).

To ensure that clinical instruction is effective, the clinical teacher is expected to have qualities that promote learning as they influence the outcomes of the student's clinical

training. Moreover, the clinical teacher should have good interpersonal skills, the ability to provide constructive criticism and interpretations, and clinical aptitude and instructional expertise (Soriano & Aquino, 2017). This finding has been supported by Reising et al. (2018) who stated that clinical instructors' knowledge abilities include understanding various learning preferences, role preparation, and specialized theoretical clinical knowledge, they further state that clinical teachers' skills include giving appropriate feedback, interpersonal, analytical, managerial, and technological abilities, as well as the capacity to provide as an inspiration and a source of assistance. Furthermore, nursing instructors' personality attributes, such as patience, trustworthiness, kindness, and a positive professional attitude, are among clinical instructors' competencies in the subject of attitude (Collier, 2018).

Students' performance in nursing programmes is aided by the assistance provided to them. Regardless of the level of support provided by clinical supervision, clinical supervisors' professional behaviour improves the quality of supervision. Professionalism also refers to the clinical supervisor's abilities, competence, and behaviours, which translates to being on time and demonstrating accountability and responsibility (Donough & Heever, 2018). Moreover, in the formation of students' personal and professional identities, interpersonal contact between professors, clinical nurses, and students is crucial.

Clinical supervision is widely acknowledged as a critical building block for producing systematic mentoring of excellent practise to encourage patient safety and superior patient care (World health Organization [WHO], 2019). However, there have been challenges with clinical instructions and supervision. Kalyani et al. (2019) reported

poor interactions with students; behavioural and verbal hostility by instructors and clinical nurses are a major element in the development of stress in students, causing a sense of inefficiency and disqualification. Concerns have also been raised regarding the improvement of students' problem-solving skills, clinical performance, motivation for learning, and reduction of anxiety, as well as the inadequacy of clinical instructors' communication skills with credibility deficit of clinical personnel in clinical settings (Beiranvand et al., 2021).

In conclusion, the role of the nurse educator is to facilitate learning by providing learning opportunities, assistance, direction, and prompt and objective evaluations. However, since nurse educators evaluate more than they supervise—which is typically handled by nursing personnel who lack teaching experience and may be unaware of the students' needs—this job is not met. Heavy workloads and negative employee attitudes may also make oversight difficult. In order to aid clinical instructors in nursing in effectively managing the teaching process, educational institutions can strengthen their practises through orientation programmes, professional development, and ongoing mentoring. If students receive adequate clinical support, their clinical performance will improve (Beiranvand et al., 2021; Kaphagawani & Useh, 2017).

2.3 Clinical learning challenges

Nursing students have the opportunity to study experimentally and transform their theoretical knowledge into skills that are important for patient care during their clinical training in a complicated clinical learning environment (Günay & Kılınç, 2018). Clinical placement is not only rewarding but also stressful, as many researchers have reported stress among nursing students during their clinical placement. Students were

expected to complete assignments that had been assigned by their clinical teachers, such as: performing a comprehensive patient assessment, promoting problem-solving, administering proper medications, and providing health education to their clients (Jackson & Touw, 2018). The challenges reported by nursing students while in the clinical area that made students anxious occurred when students lacked practical experience, were unfamiliar with certain clinical settings when dealing with challenging patients when being evaluated by a faculty member, and were afraid of making mistakes (Rezakhani et al., 2020). It has been demonstrated that strained working relationships with the supervising nurse lead to an environment that doesn't foster a sense of belonging. Moreover, the lack of supervision and support are all significantly linked to higher levels of stress and anxiety and higher attrition rates from the nursing program (Brown & Sivahop, 2017).

Other researchers have also noted the lack of adequate and trustworthy clinical evaluation as a problem. The assessments of the training students' scientific knowledge, practical abilities, and professional behaviour lacked validity (Immonen et al., 2019). The quality of clinical instructors' supervision is another challenge noted by researchers. Driscoll et al. (2019) found that harsh confrontations, violent behavior, and teachers who are annoyed by students are barriers to learning because they affect students' self-esteem, self-efficacy, and sense of self, as well as their academic and professional growth. Another difficulty, as identified by Farzi and Shahriari (2018), is nursing students' ineffective communication, inadequate preparation, emotional reactions, lack of preparation by clinical preceptors, inadequate clinical instructors' preparation, worry, and anxiety. Some of the disturbing things that the researchers found were that clinical instructors and educators didn't have enough clinical

experience, that clinical evaluations were made on a whim, and that the number of students and faculty facilities didn't match up.

These challenges affect the students in their decision-making process as they strive for a balance between these challenges and school as their priorities constantly change. In addition, students also face challenges in raising their fees as they have other responsibilities. The RN-BScN students expressed concerns that educators did not value or recognise their vast knowledge gained from their previous nursing course work and experience (Landeen et al., 2016). Thus, they become frustrated as they progress through the program, while this may lead to attrition as some may fail to complete their studies on time (Iheduru-Anderson, 2020). These challenges have led to the attrition of students from nursing training, so there is a need to identify challenges to improve the quality of training (Jamshidi et al., 2016).

The students' negative experiences in clinical training may influence the students' confidence and readiness to practice, as good clinical education should satisfy the demands and requirements of pupils in therapeutic settings (Allari & Farag, 2017). These challenges experienced by nursing students can be reduced by providing support resources and by enriching communication between faculty and students, which may increase positive feelings and the well-being of nursing students (Jackson & Touw, 2018).

2.4 Improving Clinical training

To effectively teach clinical teaching, the purposes, goals, and requirements of clinical education should be clearly stated, combining clinical data with fundamental scientific

findings. Furthermore, the clinical mentor must speak with the student nurse about specific patients (Sezer, 2018). To protect the patients from the effects of teaching if their rights are not protected, clinical teaching should be managed carefully, especially when giving feedback and supporting the students as they transition from novice to expert (Brown & Sivahop, 2017).

Due to a shortage of nursing educators and clinical staff, nursing students may receive insufficient clinical instruction and supervision, (Kaphagawani & Useh, 2017). Donough and Heever (2018) reported that clinical supervisors were dissatisfied with the high student-to-supervisor ratio, which limited their ability to connect with students and caused them to be late for appointments. According to the National Department of Health 201, the student-to-clinical supervisor ratio should be no more than 1:15. Additionally, increasing the number of clinical supervisors can help to lower the huge student-to-supervisor ratio, enabling an institution to have an educator on every ward (Health-e News, 2014). The benefits of this arrangement include that the hospital staff may be busy and in need of support from someone who is focused on clinical education; that a clinical educator can have a good relation with both preceptors and students on a ward; that the clinical educator frequently works with undergraduate and graduate students as well as nurses, who would deal with all student placement issues; and that the clinical educator can gain feedback from both parties (King et al., 2020).

In order to stay current with clinical nursing practises and to exchange knowledge with other clinical supervisors, clinical supervisors should also take part in continuing education and training in the form of educational clinical workshops (Beiranvand et al., 2021). The most important training for nurses is clinical practice's continuing education process, which focuses on a three-part educational interaction between the student, instructor, and patient and gives nurses real-world experience by exposing them to the complexity and unstructured data that are not frequently encountered (Sezer, 2018). This intervention will guarantee that evidence-based practises are implemented as well as standardised and consistent performance of procedures. Furthermore, it will result in improved employee morale, skill development, and motivated staff. Additionally, workshops may touch on professionalism and ethics to teach clinical supervisors on these topics and provide role models (Ulenaers et al., 2021). This can also be done at the faculty level of the institution being studied, and the quality and revitalization of clinical supervision at the study institution were improved as a result of this in-service training and workshops (Donough & Heever, 2018).

Peer learning is one characteristic of nursing education that should be practised in skill centres and clinical placements. Peer learning enables students to handle challenges more effectively during their initial placements, boosts their confidence, and aids in the development of their knowledge, skills, and attitudes (Maria, 2022). However, it should be noted that peer review should not be substituted with clinical supervision by clinical teachers. Thus, there is a need for collaborations between educational institutions and clinical placements to develop models of learning and supervision to improve the quality of patient care (Ülker & Korkmaz, 2017). In addition, nurse educators can also use the preceptorship model—pairing a student with a professional nurse who is responsible for education, communication, and sharing of practical realities—which can be implemented in a therapeutic learning setting. This model

provides a competent clinical preceptor, role socialization, and an opportunity to participate in patient care for the student (Vuckovic & Landgren, 2020).

Nursing instructors are academics who have specialised knowledge in teaching principles, applying theory to practice, assisting nursing students in acquiring clinical outcomes, imparting clinical skills, evaluating clinical performance, and enhancing problem-solving skills. Even though numerous research has been undertaken on nurse educators' clinical teaching abilities, significant flaws have been identified in each of the important characteristics (Beiranvand et al., 2021). The competency of clinical educators has an important role in integrating theoretical knowledge into practical knowledge. However, research shows that nurse teachers routinely teach theoretical and practical components rather than recent clinical experience, indicating that they need to learn more about clinical education. Additionally, to foster realistic and practice-based outcomes, they should emphasise critical thinking and problem-solving in the classroom (Chan et al., 2018). Thus, establishing effective relationships with students and supporting them in clinical settings aids the learning process while also promoting professional socialisation (Kalyani et al., 2019).

Hence, it is essential to have an efficient evaluation instrument—a clear, objective tool that accurately evaluates the student's performance in a clinical context. Additionally, they create a collaborative atmosphere and improve communication among the teachers, students, and clinical mentors (Phuma-Ngaiyaye et al., 2017). Additionally, through ongoing study, educational institutions should solidify their understanding of the psychological requirements for a positive learning environment (Günay & Kılınç, 2018).

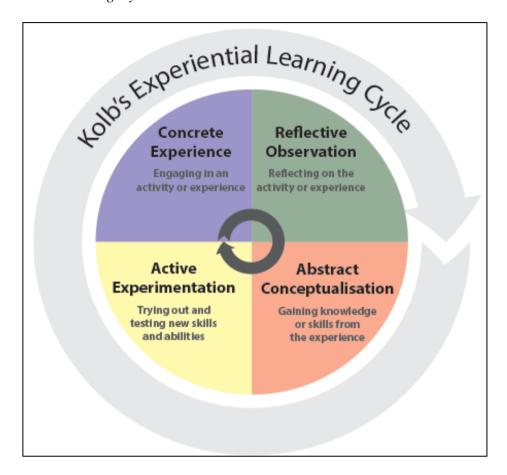
2.5 Theoretical framework

2.5.1 Kolb experiential Model

This research was based on Kolb's experiential model, whose theory is built on the foundational works of Kurt Lewin's social psychology. According to Kolb, learning is the process through which knowledge is formed by transforming experience (Kolb, 1984). It sees the acquisition of abstract ideas that may be used flexibly in a variety of contexts as part of an integrated learning process (Saxon, 2021). Although learners can enter the cycle at any step, the theory consists of a four-stage cycle where each level is mutually supportive of the others. Effective learning occurs when the student executes all four stages of the model (Kolb & Fry, 1974).

Figure 2.1

Kolb Learning Cycle



Note. Adapted from Experiential learning experience as a source of learning and development, by D. A. Kolb, 1984, p. 51

The theory has two levels: a four-stage learning cycle and four different learning styles; these two dimensions define a holistic learning space where learning transactions occur between the individual and the environment (Fewster-Thuente & Batteson, 2018).

The four-stage learning cycle is often presented by the following four stages:

- i. Concrete experience: when a new circumstance or reinterpretation is experienced, it serves as a learning opportunity (Saxon, 2021). This experience happens when students take part in and watch a class activity, a field trip, or a skill or procedure demonstration in the skills lab (Davidson, 2022).
- ii. Reflective observation of the new experience and understanding (Kolb, 1984).

 During this process, the learner becomes aware of their previous experiences, recalls them in depth, and gathers new knowledge about them. This aids in problem solving and helps to integrate theory into practise (Davidson, 2022).

 This can be enhanced by clinical teachers by enabling students to reflect on the experience, thus learning from it.
- iii. Abstract conceptualization: this occurs when the learner attempts to conceptualise what is observed (Fewster-Thuente & Batteson, 2018). This happens when students reflect on their experiences, compare them to other experiences they have had, and look for any connections they could have with them (Davidson, 2022). A new concept or a modification of an old abstract is born by reflection. (Saxon, 2021).
- iv. Active experimentation means that instead of just watching, students test how well they understand the concepts they learned in class and how they can use them to solve problems and make decisions (Fewster-Thuente & Batteson, 2018).

As everyone responds to learning in different ways, the four-learning cycle's learning styles enable learning to be orientated as posited by (Saxon, 2021). This model was adopted for this research as it describes how the development of psychomotor skills is

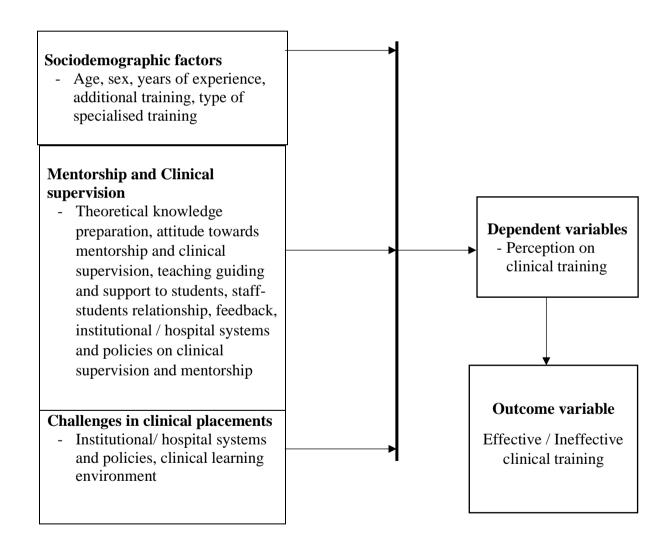
carried out, which is an essential part in the implementation of clinical training as this is where the psychomotor skills are applied.

2.6 Conceptual framework

Figure 2.2

Conceptual Framework

Independent variables



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research design, study area, target population, sampling, data collecting, instrumentation, data collection processes, and data analysis methodologies are all covered in this chapter. This chapter also covered the ethical concerns that underpinned this research.

3.2 Research design

The study design was a descriptive cross-sectional survey seeking to determine the perceptions of the RN-BSN upgrade students on clinical placements at Kenya Methodist University, Nairobi campus (KeMU). A cross-sectional study provides a snapshot of the current condition when the entire research population is evaluated at once (Aggarwal & Ranganathan, 2019). This research used a mixed method of data collection, both qualitative and quantitative data.

3.3 Study area

This research was conducted at Kenya Methodist University, Nairobi campus. The university is a chartered Christian university since 2006, with the main campus situated in Meru and satellite campuses in Nairobi and Mombasa. Nairobi is the capital city and the largest city in Kenya, which is a metropolitan city located in the southern region of the country and occupies 696 square kilometres of land, with a population of approximately 5.12 million people (World Population Review, n.d.).

Kenya Methodist University, Nairobi campus is located within Nairobi Central

Business District (CBD) situated at KeMU towers, Koinange/Monrovia Street and

University Way.

3.4 Target population

The target population was all students taking RN-BSN upgrade training at Kenya

Methodist University, Nairobi campus. The accessible population was all RN-BScN

students who had registered for the September-December trimester 2021-2022

academic year. The estimated number of students who had registered for the

September-December trimester 2021/2022 academic year was 144 students (Kemu

registry, Nairobi campus).

3.5 Sampling procedure

3.5.1 Sample size determination

The sample size was determined using Fisher's formula. As suggested by Mugenda

and Mugenda (2003), the formula is useful for social science research.

$$n = \frac{z^2 pq}{d^2}$$

Where: n= the desired sample size

Z=the standard normal deviate at the required confidence interval 95%

P=the proportion in the target population estimated to have the characteristics

being measured (0.5)

q=1-p

34

d= the level of statistical significance set (0.05)

Hence the sample size was

$$n = \frac{1.96 \times 1.96 \times 0.5 \times 0.5}{0.05 \times 0.05}$$

$$n = 384$$

There were 144 students registered for the September–December 2021/2022 academic year (Kemu registry, Nairobi campus). The sample size was reduced because the target population was less than 10,000. Hence, the following formula was used to decrease the final sample estimate:

$$nf = \frac{n}{(1+n)/N}$$

Where: nf - The desired sample size

n- The desired sample size (when the target population is greater than 10,000)

N – The estimate of the population size

$$nf = \frac{384}{1 + \frac{384}{N(144)}}$$

Thus: nf = 105 students

An addition of 10% was added to the sample population, to cater for respondents who will fail to complete the questionnaire (Andrade, 2020)

$$(^{10}/_{100} \times 105 \text{ students}) + 105 \text{ students} = 115 \text{ sample size}$$

A sample population of 115 students was arrived at.

3.5.2 Sampling technique

A list of students who had registered for the September – December trimester for the 2021/2022 academic year was obtained from the campus registry. Thereafter, the researcher employed purposive sampling to select study participants, those who met the eligibility criteria were chosen to take part in the study.

3.5.3 Eligibility criteria

3.5.3.1 Inclusion criteria

The inclusion criteria were: all upgrading RN-BScN students undertaking their academic programme at KeMU; the upgrading RN-BScN students who had registered for the September–December 2021/2022 academic year; the upgrading RN-BScN students should have completed at least one clinical placement; and the upgrading RN-BScN students who gave consent to participate in the study were included in the study.

3.5.3.2 Exclusion criteria

The study excluded all upgrading RN-BScN students who had not registered for the September–December 2021/2022 academic year; the upgrading students who did not consent to participate in the study; and the upgrading students who were in their first trimester of study.

3.6 Instrumentation

Data was collected by self-administered semi-structured questionnaire and Focused Group Discussion guide.

3.6.1. Questionnaire

To collect data from the participants, a pre-coded self-administered questionnaire with both closed and open-ended questions was used. The closed-ended questions were composed of questions with a limited response where the participants chose answers from pre-defined responses indicated on the questionnaire, whereas the open-ended questions in the questionnaire were semi-structured questions that gave the participants the freedom to express themselves. The questionnaire consisted of 4 sections: A, B, C, and D, derived from the specific objectives of the study, the literature review, and the conceptual framework. Section A consisted of questions on demographic data of the study participant, and sections B and C had questions on the Likert scale, which ranged from very dissatisfied (1) to very satisfied (5) with questions on the views on clinical placements, training, and evaluation; whereas, Section D consisted of open-ended questions which explored the challenges on clinical training, ways to improve clinical training, and benefits of the upgrade program. The questionnaire consisted of 40 questions.

3.6.2 Focus group discussion

The Focus Group Discussion sought to elucidate more information on clinical placements, challenges, and ways to improve clinical training. The focus group discussion guide consisted of 7 unstructured questions from objectives two and three

on challenges and ways of improving nursing clinical training (Appendix 5). The guide was derived from the objectives, literature review, and the conceptual framework.

3.6.3 Pre-testing of the questionnaire

A pre-test of the data collection tools was done at Kabarak University, among 12 upgrading RN-BScN students (10% of the study population). The feedback regarding the tools' instructions, clarity, and relevance was incorporated to improve them.

3.6.4 Validity

The construct validity of the instrument was supported by the literature and guided by the research objectives. In addition, to ensure content validity, views from my supervisors regarding the tool were incorporated. A pre-test of the tools was done to find the unnoticed limitations in the tool's applicability, where the opinions and ideas regarding the tool's relevancy, instructions, and clarity were taken into consideration.

3.6.5 Reliability

A pre-test was conducted on the instruments to check for consistency and clarity to ensure reliability. Additionally, the difficulties found in the pre-test study were included in the instrument to create precise and meticulous wording for each question to prevent ambiguity. When the tool's reliability was assessed using Cronbach's Alpha, a value of 0.935 was found; because this number was higher than 0.6, the tool was deemed to be trustworthy (Taber, 2017).

3.7 Methods of data collection

3.7.1 Data collection procedure

A self-administered questionnaire (appendix 4) was used to collect data from 115 students who met the eligibility criteria and the second-year students who were willing to participate in the focus group discussion. The researcher sought a registration list for the students who had registered for the September–December 2021–2022 academic year. Thereafter, class representatives were identified for each class as the contact people. The contact person identified served as a liaison who led the researcher to the students who fitted the eligibility criteria. Prior to the administration of the questionnaires, the eligible students were provided with a written consent (appendix 3) to sign. The researcher was present during the entire process to provide clarifications on the study tool and to check for completeness. Each questionnaire took approximately thirty minutes to fill out.

A focus group guide (appendix 5) was used to elucidate more information on challenges and ways of improving clinical training. Participants were selected from the upgrading Bachelor of Science in nursing second-year students among the eligibility criteria through voluntary response sampling. Communication was done through their class representatives and those who were willing to participate in the study were given an informed consent to sign electronically and a Google-Meet link. The participants were requested to share with the researcher their signed consent prior to the session. Two sessions of focus group discussion were conducted, where the first FGD consisted of nine students, whereas the second group was made up of eight students, and each meeting took 60 minutes via the Google-Meet platform. The

respondents were urged to raise important issues which had not been addressed in the questionnaire. Probing was used to elucidate more information by the researcher.

The period for data collection took four weeks, with an average of six questionnaires filled per day. The two FGD was led by the researcher and the recording was done by the use of computer recording.

3.7.2 Ethical considerations

The researcher sought approval from Kenya Methodist University's Directorate of Post-Graduate Studies (appendix 5). The proposal was sent to the university's Ethical Review Committee for approval (appendix 6). NACOSTI (National Commission for Science, Technology, and Innovation) provided a research permit (appendix 7), and Kenya Methodist University's vice chancellor granted permission to conduct the study (appendix 8). Participants in the study were advised that they could withdraw at any time and that there was no risk of physical, financial, or legal harm from the research. Nevertheless, there was a risk of psychological harm in the event that personal information was disclosed. Additionally, they were told that there were no advantages to taking part in the study; rather, the results would improve nursing clinical training. Participants were also guaranteed anonymity and confidentiality of the information shared, which was maintained by using coding rather than the participant's name. The raw data was kept in a locked cabinet that only the researcher could open, and the data was analysed on a locked computer.

3.8 Operational definition of variables

3.8.1 Independent variables

The independent variables in this study included the socio-demographic data, mentorship and clinical supervision, challenges in the clinical placements and benefits of upgrading. These factors influence clinical training either positively or negatively thus they should be observed.

Socio-demographic data – age, sex, occupation (private/public health facility), years of experience.

Mentorship and clinical supervision – theoretical knowledge preparation and application, clinical supervision, attitude towards mentorship and clinical supervision, teaching/guiding and support to students, feedback, staff-student relationship, policies and systems on clinical supervision and mentorship.

Clinical learning environments, institutions, and hospital systems provide challenges in clinical placements.

3.8.2 Dependent variable

Perceptions on clinical training

3.8.3 Outcome variable

Effective or ineffective clinical training

3.9 Methods of data analysis

3.9.1 Data sorting, cleaning and storage

The researcher confirmed whether all the coded questionnaires were completely filled before collection. Raw data retrieved from the questionnaires were systematically arranged thereafter, data cleaning was done to ensure accuracy, completeness, and uniformity. All information captured on the questionnaire was entered into the computer database, while the filled questionnaires were stored in a locked cabinet. Data cleaning was validated periodically and then merged into one computer database; errors identified during the validation exercise were confirmed from the questionnaire. The qualitative raw data obtained from the Focused Group Discussion (FGD) and the open-ended questions on the questionnaire were categorised and themes developed.

3.9.2 Data analysis

Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) version 26. The results were presented in descriptive form by percentages, tables and figures for descriptive data. Multiple regression was done to test for associations while Chi-square test was done to check the significance between the independent and dependent variables at 95% confidence interval. The qualitative raw data obtained from the Focused Group Discussion (FGD) and the open-ended questions on the questionnaire were categorised where themes and patterns were identified and created thereafter, clear narratives were developed.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study on the perceptions of in-service nursing students on clinical training at Kenya Methodist University, Nairobi campus. A total sample size of 115 nursing students who met the eligibility criteria participated. This chapter is split into four smaller sections, each of which presents the findings following the study's main goal. While analysing the work of other researchers from other subject fields in the literature, pertinent comparisons, and noteworthy linkages have been highlighted. This chapter will also provide a full interpretation and cross-analysis of the findings.

4.2 Socio-demographic characteristics of the respondents

Of the 115 study participants, males made up 24% (28) while females made up 76% (87). Among all the subjects reviewed, 54 (47%) participants were aged 20–29, 48 (41.7%) were aged 30–39, 11 (9.6%) were aged 40–49, whilst the least were 2 (1.7%) who were aged 50–59. The majority of the study participants were married, 73 (63.5%), whilst only 2 were divorced or separated. Christianity dominated the religion at 100 (87%) compared to other religions. Forty-six students (40%) reported having less than five years of work experience, while 69 students (60%) reported having more than five years of nursing practise work experience. Table 4.1 indicates the sociodemographic status of the respondents.

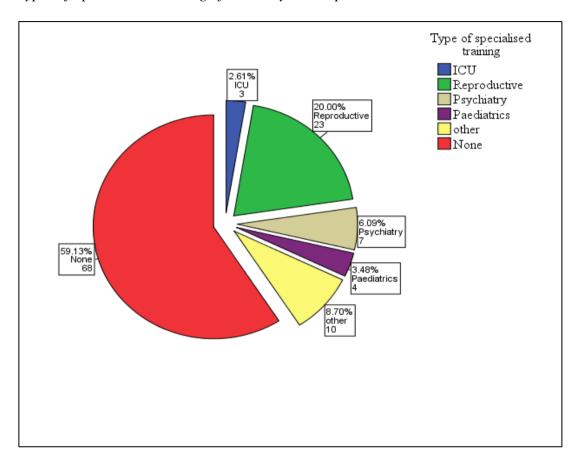
Table 4.1Socio-Demographic Characteristics of the Respondents.

Socio-demographic	Variables	Frequency (N=115)	Percentage (%)
Age of respondents	10 - 19	0	0.0%
	20 - 29	54	47.0%
	30 - 39	48	41.7%
	40 - 49	11	9.6%
	50 - 59	2	1.7%
Gender	Male	28	24%
	Female	87	76%
Marital status	Single	31	27.0%
	Married	73	63.5%
	Divorced/separated	2	1.7%
	Widowed	9	7.8%
Religion	Christian	100	87.0%
	Muslim	9	7.8%
	Pagan	6	5.2%
Years of experience	0 - <2 years	4	3.5%
	2 - <5 years	42	36.5%
	5 - <10 years	35	30.4%
	Above 10 years	34	29.6%
Additional training	Yes	45	39.1%
	No	70	60.9%

Forty-one percent of the respondents reported having undergone additional training in different specialties, the specialties as shown in figure 4.1, including 3 (2.6%) in the Intensive Care Unit (ICU), 23 (20%) in Reproductive Health, 4 (3.5%) in Paediatrics, and 7 (6%) in Psychiatry. Ten respondents (8.7%) did not specify their specialty.

Figure 4.1

Types of Specialized Training of the Study Participants



4.3 Nursing Students' opinions towards Clinical training

Data on this objective was collected through a questionnaire via a 5-point Likert scale, whose range was 1–5 was as follows: 1-very dissatisfied, 2 - dissatisfied, 3-neither satisfied nor dissatisfied, 4-satisfied, and 5-very satisfied. To identify the scale for interpretation of the results, data was summarized into three categories: 1 – dissatisfied, for the very dissatisfied and dissatisfied; 2 – neither satisfied nor dissatisfied; and 3 – satisfied, for the very satisfied and satisfied. The data was analysed and reported using descriptive statistics, and multiple regression was used to investigate the relationship between the dependent and independent variables.

4.3.1 Nursing students' opinions towards Clinical placements

Of the 115 study participants, 71 (61.7%) were satisfied with their clinical placements. Moreover, the majority of respondents, 60 (69%), reported that it enabled them to transfer theory into practice. In addition, 60 (69%) reported that clinical placements helped them develop skills relevant to current nursing practice. Eighty-four respondents (73%) reported that clinical placements provided them the opportunity to apply critical thinking skills in problem-solving. However, 55 (47.8%) respondents reported that clinical placement did not aid in developing new knowledge, skills, and practice; whereas 67 (58.3%) were neither satisfied nor dissatisfied with meeting their objectives in clinical placements, as indicated in table 4.2.

 Table 4.2

 Likert-Scale Response on Students' Opinion towards Clinical Placements

Statement	Opinion	Frequency	Percentage
Every Clinical placement	Dissatisfied	19	16.5
provided a positive	Neither satisfied nor	25	21.7
learning environment	dissatisfied		
	Satisfied	71	61.7
Clinical settings developed	Dissatisfied	55	47.8
new knowledge, skills and	Neither satisfied nor	26	22.6
practice	dissatisfied		
	Satisfied	34	29.6
Clinical placement	Dissatisfied	16	13.9
provided opportunity to	Neither satisfied nor	67	58.3
meet clinical objectives	dissatisfied		
	Satisfied	32	27.8
Skills Learned were	Dissatisfied	15	13
relevant to current nursing	Neither satisfied nor	31	27
practice	dissatisfied		
	Satisfied	69	60
Clinical placement	Dissatisfied	17	14.8
provided an opportunity to	Neither satisfied nor	29	25.2
transfer theory into practice	dissatisfied		
	Satisfied	69	60
Clinical placement	Dissatisfied	14	12.2
provided an opportunity to	Neither satisfied nor	17	14.8
apply critical thinking	dissatisfied		
skills in problem-solving	Satisfied	84	73

4.3.2 Nursing Students' opinions towards mentorship

To assess students' views on mentorship, respondents were asked questions about support by hospital staff, appropriate feedback by hospital staff, opportunities for hands-on experience, use of evidence-based practice, and research culture by mentors. Sixty-eight (59.1%) of the respondents reported that they were satisfied with the opportunities the clinical placement provided for hands-on experience, whereas 23 (20%) were dissatisfied and 24 (20.9%) were neither satisfied nor dissatisfied. On feedback by hospital staff, 35 (30.4%) were satisfied, whilst 31 (27%) were dissatisfied, whereas 49 (42.6%) were neither satisfied nor dissatisfied with the feedback by the hospital staff. Forty-three respondents (37.4%) were satisfied with the use of research culture by mentors. However, 7 (6.1%) were dissatisfied and 65 (56.5%) were neither satisfied nor dissatisfied. On the use of Evidence-Based Practice in clinical practice, 67 (58.3%) respondents were dissatisfied, whereas 34 (29.5%) were satisfied and 14 (12.2%) were neither satisfied nor dissatisfied. The results are displayed in Table 4.3.

Table 4.3

Likert-Scale Response on Students' Opinion towards Clinical Mentors

Statement	Opinion	Frequency	Percentage	
Support by hospital staff	Dissatisfied	69	60	
	Neither satisfied	24	20.9	
	nor dissatisfied			
	Satisfied	22	19.1	
Appropriate feedback by hospital	Dissatisfied	31	27	
staff	Neither satisfied	49	42.6	
	nor dissatisfied			
	Satisfied	35	30.4	
Opportunities for hands-on	Dissatisfied	23	20	
experience in clinical placement	Neither satisfied	24	20.9	
site	nor dissatisfied			
	Satisfied	68	59.1	
Use of Evidence-based practice in	Dissatisfied	67	58.3	
clinical placement site	Neither satisfied	14	12.2	
	nor dissatisfied			
	Satisfied	34	29.5	
Research culture encouraged by	Dissatisfied	7	6.1	
mentors in the hospital	Neither satisfied	65	56.5	
	nor dissatisfied			
	Satisfied	43	37.4	

4.3.3 Nursing Students' opinions towards clinical supervision

In the students' opinion towards clinical supervision, the majority 98 (85.2%) of respondents were satisfied with the emphasis placed on clinical practice, stating that it was similar to knowledge gained in class. In addition, 92 (80%) of respondents were satisfied with the provision of clinical objectives before their placements. Moreover, the majority of respondents were satisfied with the lecturers' and clinical instructors'

interpersonal skills, which were 76 (66.1%) and 81 (70.1%), respectively. Seventy-four (64.3%) were satisfied with the university clinical instructor's professional experience and competence while demonstrating procedures. Furthermore, the majority of 80 (69.6%) of the respondents thought that clinical assessment and evaluation were satisfactory as they stated that it was always objective and the feedback was always immediate 81 (70.5%). However, 83 (72.2%) of respondents were dissatisfied with the involvement of lecturers in clinical supervision, citing that it was insufficient. Sixty-three (54.8%) respondents were dissatisfied with general supervision in clinical placements, citing that they lacked regular visits and guidance by mentors and preceptors.

 Table 4.4

 Likert-Scale Response on Students' Opinion Towards Clinical Supervision

Statement	Opinion	Frequency	Percentage
Emphasis on clinical skills was similar to	Dissatisfied	17	14.8
the knowledge in class	Satisfied	98	85.2
Provision of clinical objectives before	Dissatisfied	15	13
clinical placement	Neither satisfied	8	7
•	nor dissatisfied		
	Satisfied	92	80
Lecturers' interpersonal skills	Dissatisfied	11	9.6
•	Neither satisfied	28	24.3
	nor dissatisfied		
	Satisfied	76	66.1
Clinical instructors' interpersonal skills	Dissatisfied	17	14.8
1	Neither satisfied	17	14.8
	nor dissatisfied		
	Satisfied	81	70.1
Clinical instructors displayed adequate	Dissatisfied	7	6.1
professional experience and competency	Neither satisfied	34	29.6
in demonstrating procedures	nor dissatisfied		
	Satisfied	74	64.3
Clinical evaluation was always objective	Dissatisfied	16	13.9
, ,	Neither satisfied	19	16.5
	nor dissatisfied		
	Satisfied	80	69.6
Clinical evaluation feedback was	Dissatisfied	19	16.5
immediate	Neither satisfied	15	13
	nor dissatisfied		
	Satisfied	81	70.5
Involvement of lecturers in clinical	Dissatisfied	83	72.2
teaching	Neither satisfied	12	10.4
-	nor dissatisfied		
	Satisfied	20	17.4
Adequate supervision in clinical	Dissatisfied	63	54.8
placement	Neither satisfied	28	24.3
•	nor dissatisfied		
	Satisfied	24	20.9
Clinical instructors' involvement in	Dissatisfied	15	13
clinical teaching	Neither satisfied	60	52.2
-	nor dissatisfied		
	Satisfied	40	34.8
Appropriate feedback by clinical	Dissatisfied	6	5.2
educators	Neither satisfied	64	55.7
	nor dissatisfied		
	Satisfied	45	39.1

4.3.4 Multiple regression analysis of independent and dependent variable

Table 4.5 indicates the results of multiple regression analysis of the independent and dependent variables. The findings show that clinical placement sites (p = 0.034), mentorship (p = 0.043), and clinical supervision (p = 0.000) were all strongly associated with perceptions of clinical training, with p-values less than 0.05 at the 95% confidence level. There was no association between age, years of experience, additional training and students' perceptions of clinical training at the significance of (p = 0.978, p = 0.868, p = 0.996, and p = 0.580) respectively.

Table 4.5

Multiple Regression Analysis of Independent and Dependent Variable

	Model Fitting			
	Criteria	Likelihood Ratio Tests		Tests
	-2 Log			
	Likelihood of			
Effect	Reduced Model	Chi-Square	df	Sig.
Clinical Placement site	3.391	15.876	1	.034
Mentorship	55.249	11.734	1	.043
Clinical supervision	62.519	21.003	1	.000
Age of respondents	41.713	.197	3	.978
Marital status	43.195	1.679	3	.642
Religion	43.082	1.566	2	.457
Years of experience	41.543	.028	1	.868
Years after completion of	41.611	.095	1	.757
diploma in nursing				
Additional training	41.516	.000	1	.996
Type of specialised	45.309	3.794	5	.580
training				
Achievement after	43.595	2.079	4	.721
specialised training				

4.4 Challenges faced by respondents

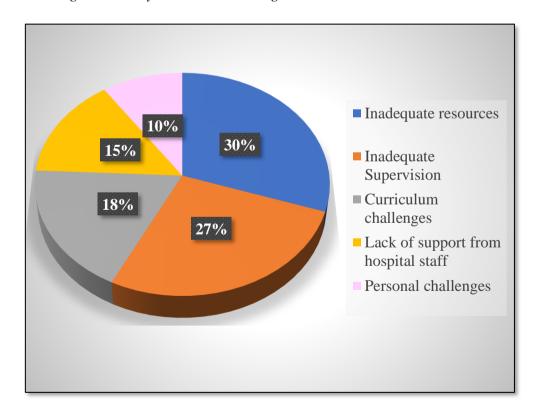
The results of this objective were collected through both qualitative and quantitative methods; from the questionnaire and also from the Focus Group Discussion guide. The qualitative data collected from the above tools was organized and sorted into a framework where themes were developed.

4.4.1 Quantitative data on challenges faced by respondents

The challenges identified by the respondents include inadequate resources (30%), inadequate supervision (27%), challenges with the curriculum (18%), lack of support by hospital staff (15%), and personal challenges (10%), as highlighted in figure 4.2.

Figure 4.2

Challenges Faced by RN – BSc. Nursing Students in Clinical Placements



4.4.2 Qualitative data on challenges faced by respondents

During the focus group discussions, respondents discussed the difficulties they encountered while on clinical placement. The comments revealed the following themes: lack of supervision in clinical areas; limited resources; inadequate preparation prior to clinical placements; and personal challenges.

On clinical supervision, respondents reported that they did not only lack supervision from university clinical instructors and lecturers but also from preceptors at clinical placement sites, which interfered with their clinical performance. Despite outstanding collaboration between the university and the clinical placement site, university clinical instructors were only seen on occasion, while lecturers were only seen during assessments. Furthermore, it was stated that most facilities lacked mentors and preceptors, and nurses had ambiguous roles in how to supervise them. Another issue identified at the clinical placement site was a lack of resources. Respondents also reported many difficulties during assessments. The placement sites lacked the necessary equipment, forcing them to obtain it elsewhere or improvise. Additionally, due to the scarcity of human resources, students were required to work as nurses rather than nursing students. The nursing staff took advantage of their presence and went on leave during their rotations; thus, students were pinned to routine nursing care.

Respondents stated that they were not well prepared for clinical placements. They noted that they did not have the opportunity to practice in simulated situations prior to clinical placements and that they were not provided with the Nursing Council of Kenya procedure manual on time. Furthermore, respondents claimed that they faced challenges during the COVID-19 pandemic since they were not fully prepared for any

emerging or re-emerging disease. In addition, respondents noted that they were not placed in critical placement sites such as the renal unit, palliative and oncology units, intensive care units, and gender-based violence centres.

Regarding personal challenges, respondents highlighted burnout, juggling work, family, and school, and financial issues. Some complained that their employers didn't give them enough time off to study. This meant that they had to work and study at the same time, which led to burnout.

4.5 Suggestions for improving clinical training

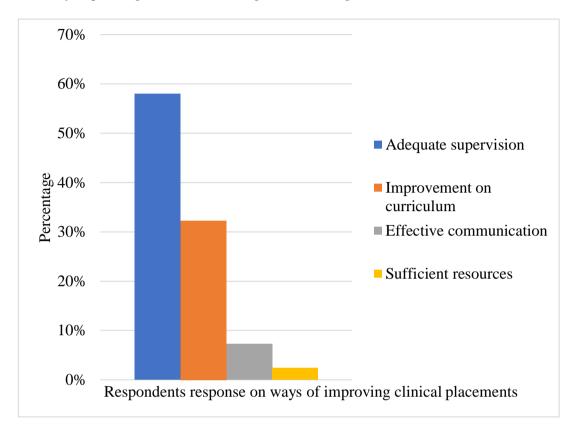
The results of this objective were collected through open-ended questions in section D of the questionnaire and discussions from focus group discussions. The information obtained was organised, frameworks were identified, and the data was sorted into themes.

4.5.1 Quantitative data on improving clinical training

To improve clinical training, respondents proposed the following: 58.6% reported that there should be adequate supervision, 32% improvement in the curriculum, 7% reported effective communication, and 3% reported sufficient resource provision. This is shown in figure 4.3

Figure 4.3

Areas of Improving Clinical Teaching and Learning



4.5.2 Qualitative data on improving clinical training

Focus Group Discussion elucidated the following themes for improving clinical teaching and learning: follow-up by university clinical instructors and lecturers; mentor recruitment support and training; an improvement of the curriculum; effective communication; sufficient resources; and collaborations between clinical placement sites and the university.

To improve the clinical supervision of students in the clinical area, respondents proposed the need to have regular visits by the clinical instructors and lecturers. Respondents reported that there was a need to increase the number of lecturer clinical visits and the number of clinical instructors in the university. Furthermore, they

recommended that clinical supervisory visits should be done regularly where supervisors should be able to: demonstrate procedures; inform them of the expectations during training; and supervise their placements. Moreover, the respondents reported that good communication between lecturers and students facilitates learning.

On mentor recruitment, support, and training, respondents reported that they had no mentor support during their training and the nurses they worked with were adamant about teaching them as they felt inferior. The respondents indicated that there is a need to have mentors recruited by the school who should be trained and guided and have their expectations communicated to them to foster learning.

Respondents expressed the need to address curriculum issues such as reducing placement hours of the clinical sites perfected at diploma level, thus creating time for clinical placements in critical placement sites in Intensive Care Unit (ICU), Gender Based Violence (GBV) centres, renal placements, oncology and palliative placement sites. Furthermore, they expressed the need to be adequately trained on emerging and re-emerging diseases and to practise in a clinical skills laboratory to refresh their psychomotor skills before clinical evaluation.

Sufficient resources was another theme developed. Respondents cited that resources foster learning and aid in providing quality care to patients. The unavailability of resources compromises the quality of care given to a patient as it fosters the use of "shortcuts". Also, some of the respondents said that institutions should provide resources that might not be available at the placement site.

4.6 Discussion of findings

This section presents a discussion of the findings of the results. The researcher sought to determine the respondents' perceptions on clinical training among the RN-BSc nursing students on clinical training at KeMU. The discussion was based on four objectives: students' opinions towards clinical placement; supervision and mentorship; challenges experienced by students in clinical placements; ways of improving clinical placements; and the perceived benefits of upgrading.

Nursing students' opinions towards Clinical placements

This research demonstrated that the majority of respondents (61.7%) were satisfied with the clinical placement sites, which is in tandem with several studies, among them studies done in Malawi and Australia, that showed how satisfied the students were with the clinical learning environment (Mbakaya et al., 2020). Satisfaction improves learning, as proposed by other studies. Furthermore, Ulenaers et al. (2021) discovered that clinical settings provided students with the necessary information about changing clinical practices, fostering a positive learning environment, and appreciated the assistance provided to the students during clinical practice. However, this study's findings on clinical placements contradict findings by Kalyani et al. (2019), who noted that clinical placements had ineffective teachers, unfavourable instructional approaches, and an inappropriate clinical setting. It is important to note that students go to different placement sites, and thus they face varied experiences, which ultimately affect their learning.

Nursing Students' opinions towards mentorship

Students need guidance from mentors who are clinical professionals to develop their personal and professional experiences. The majority of 68 (59.1%) of the respondents were satisfied with the opportunities for hands-on experience in the clinical placement site but lacked support from the hospital staff, 69 (60%). This may be attributed to the increased workload, lack of motivation among nurses, inferiority complex and lack of communication between the health facility and the institution. These findings are similar to King et al.'s (2020) findings, who noted that there was more hands-on experience but students needed more guidance from supervisors. Moreover, a study done in Jordan on first-year experience in clinical practise reported that the clinical placements provided students with hands-on experience as they were able to transfer the skills learned on the mannequins to real patients. However, the nursing staff were reluctant to support them in the transfer of learning (Mahasneh et al., 2021). This is also in tandem with Atakro et al. (2019), who found that most registered nurses had diplomas and certificates and were reluctant to train undergraduate nursing students.

The majority of students, 67 (58.3%), expressed dissatisfaction with the EBP's application at the clinical placement site. This result is consistent with prior research studies that suggested that lack of time, money, understanding, negative attitudes toward EBP, and lack of role models were barriers to the adoption of EBP (Blackman & Giles, 2017; Fiset et al., 2017). Despite suggestions for educational methods to improve EBP knowledge and competency, a recent study suggests that nurses may not be sufficiently prepared to use EBP (Horntvedt et al., 2018). Thus, it is important to incorporate EBP into nursing training and also into the Continuous Professional

Development (CPD) programme for nurses to aid in its implementation, which will ultimately improve nursing care.

Nursing Students' opinions towards clinical supervision

Despite the need to have effective supervision, this study found that there was inadequate supervision by the lecturers, instructors, and mentors. The majority of the respondents, 83 (72.2%), were dissatisfied with the involvement of lecturers in clinical supervision and were also dissatisfied with general supervision in the clinical area (54.8%). This finding is similar to Kaphagawani and Useh (2017), who found that nurse educators from the institution were responsible for clinical teaching and rarely attended clinical placements to supervise students, which warranted students completing their placements without their presence or less time with them in the therapeutic setting. Furthermore, other nurse educators reported having only attended orientations for new allocations and for clinical assessments (Gemuhay et al., 2019). Despite the dissatisfaction with supervision by the respondents, the majority of them (69.6%) were satisfied with clinical assessment and evaluation. They stated that it was always objective and the feedback was always immediate (70.5%). This finding goes against what Mbakaya et al. (2020) found, which was that students were not happy with the clinical evaluations and feedback they got from lecturers and skilled experts during clinical practice.

Challenges in clinical training

Clinical placements are required for students to learn clinical skills necessary for nursing practice. This study found several challenges that faced the upgrading RN- BScN (in-service) nursing students while in their clinical learning environment. There were not enough resources, not enough supervision, problems with the curriculum, not enough support from the hospital staff, and personal problems.

The necessity to innovate and use subpar nursing techniques results from a shortage of clinical resources and relevant equipment, which interferes with the quality of clinical learning provided. Nursing students study procedures in an ideal simulated environment; thereafter, they are subsequently assigned to a subpar, underfunded clinical facility. This study findings showed that students lacked resources that prompted them to improvise resources, which fostered the use of shortcuts in the performance of the procedures. Similar findings were noted by Mbakaya et al. (2020), where students were compelled to improvise when giving nursing care to patients. In addition, students struggled to integrate theory into practise due to a lack of resources and skilled professionals who did not follow protocols when executing procedures. (Muthathi et al., 2017) Because of this, nursing students get confused and lack confidence in their skills.

Even without the added constraints of a pandemic, the COVID-19 epidemic had a significant impact on the experiences of nursing students, from organisational changes to concerns about their abilities to basic uncertainties about their ability to continue their studies due to the effects of the disease, which could be acquired in hospitals and often has chronic depletion of medical supplies (Eweida et al., 2020; Ulenaers et al., 2021). Respondents in this study expressed the need to be adequately prepared and trained on emerging and re-emerging diseases. This finding is similar to that of Ulenaers et al., (2021), whose findings indicated the need for students to be supported

and prepared during a pandemic. Several researchers (Eweida et al., 2020; Ghrayeb et al., 2017; Houghton et al., 2020) have also pointed out that hospitals do not have enough personal protective equipment (PPEs).

The lack of student mentors in clinical placements is an alarming issue that needs to be addressed with urgency as learning in a clinical setting is done by doing, thus ward nurses and instructors must provide supervision and guidance (Kamphinda & Chilemba, 2019). The function of the clinical nurse in the development of students' learning is critical (Vuckovic & Landgren, 2020). The lack of effective preceptor training, as well as the need for it, has been mentioned in relation to the quality of students' experiences (King et al., 2020). However, this is not true in most instances. Respondents in this research reported that they lacked mentors in the hospital, and the nurses failed to take up the role of mentorship. The study also found that the nurses didn't think they were ready to supervise the upgrading students because they saw them as co-workers.

Conflicting practises between the ideal nursing practises offered in the classroom and those in the clinical setting can cause confusion, tension, and anxiety in students if they are not properly taught and supervised (Mbakaya et al., 2020). Demonstration of procedures is one of the vital roles that should be done by clinical supervisors, preceptors, and mentors when performing clinical supervision. However, to avoid confusion while integrating the abilities acquired in the clinical skills laboratory into the clinical practicum, there is a need to standardise procedures to foster uniformity in their performance (Muthathi et al., 2017). To achieve this, there is a need to follow the guidelines provided by the Nursing Council of Kenya (NCK) in the procedure manual.

Nursing professors are reminded that RN to BSN students are not typical students and face numerous hurdles. Nursing schools should also be aware that they are viewed as both a challenge and a support system. Students' challenges identified in this research included financial challenges, transport challenges, burn-out and striking a balance between school, work and family. This finding is similar to Grant-Smith and De-Zwaan (2019), who stated that the major financial concerns for nursing students during clinical placements were increased transportation costs and income loss, along with work-appropriate attire, additional meals, child care costs, and the purchase of new equipment and materials. Additionally, nurses' capacity to operate safely in a clinical care setting is harmed by fatigue, which not only has an influence on their health but also their quality of life outside of work. Other studies noted that there were high levels of weariness, which hampered patient care, had a detrimental impact on their personal lives, and generated a toxic unit environment, which led to physical, psychological, and financial consequences, with some abandoning the nursing profession (Minton & Birks, 2019; Wolf et al., 2017). Furthermore, financial and familial obligations and a lack of peer support, work environment, lack of managerial and company support, employer pressure, and peer pressure were personal challenges encountered by upgrading RN-BScN students (Iheduru-Anderson, 2020).

Suggested ways of improving clinical training

This study found some of the techniques that can be adopted to improve the clinical teaching and learning of nursing students in the clinical learning environment. The recommendations made by the students include having adequate supervision, an improvement in the curriculum, effective communication, and sufficient resources. A

higher rating of student clinical experience has been associated with adequate supervision, which is consistent with previous findings (Ziba et al., 2021). In addition, students value their clinical placement when they get a chance to communicate with the clinical instructor, and their concerns about their well-being are taken into consideration. Research indicates that students who are supported by preceptors develop greater confidence and competence in clinical practise and achieve clinical learning objectives (Mbakaya et al., 2020; Phuma-Ngaiyaye et al., 2017). In addition, studies show that students who have the opportunity to meet with a supervisor on a more regular basis tend to value the clinical environment's contribution to their skill development. So, a supervisor or mentor can help the student learn more and improve their skills (Ziba et al., 2021).

There is a need to identify nurse preceptors and train them effectively to help the nurse instructor provide quality student clinical experiences and efficiently manage the teaching process, as suggested by respondents in this study. This finding is in tandem with other studies whose findings state that to advance clinical knowledge and performance, Clinical supervisors must participate in clinical workshops for in-service training and ongoing professional development (Phuma-Ngaiyaye et al., 2017; Ziba et al., 2021). This will help standardise treatment and implement evidence-based procedures.

Another theme that came out is curriculum improvement. This can be done through increased skills in laboratory practical time, placement of students in critical clinical areas, and adequate preparation for emerging and re-emerging diseases. Similar findings were reported by Vuckovic and Landgren (2020), that skills laboratory

practises prepare students for the experiences they will encounter in their clinical placements. Hence, students must acquire clinical skills learning. This can be done by creating a genuine environment, boosting motivation and supplying resources for multiple approaches and repetitions within clinical skills training (Hardavella et al., 2017). Students perform better in clinical evaluations when they demonstrate proficiency in the performance of the skill while in the skills laboratory due to decreased anxiety and a change in behaviour as it reinforces knowledge to students (Nakagawa & Sasai, 2021). In addition, limited clinical placement in specialist units may limit clinical encounters in real-world patient care situations. Contrary to this, our study respondents reported that they were not placed in critical areas such as the intensive care unit, renal unit, and gender-based violence centres. This impeded learning.

Teaching hospitals should do more to enhance the clinical learning experiences of nursing students and need to have appropriate facilities, equipment, and learning materials (Kamphinda & Chilemba, 2019). In addition, nurses need to be furnished with functional medical equipment and undergo continuous professional development in order to offer great nursing care (Moyimane et al., 2017). Carolan et al. (2020) proposed the need for hospitals and teaching institutions to work together on issues like PPEs and other resources for students' protection against the disease while they are in clinical placements. When facilities are provided to students, they will have a better opportunity to put into practise what is taught in class.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents an overview of the research findings, conclusions, and recommendations based on those findings.

5.2 Summary

The purpose of this study was to investigate the perspectives of in-service nursing students on clinical training at Kenya Methodist University's Nairobi campus. The objectives of the study were to: assess the RN-BScN students' opinion toward clinical training; identify challenges faced by RN-BScN students in clinical placements; and determine ways of improving clinical teaching and learning of nursing students at Kenya Methodist University. The study employed a descriptive study design; the sample size comprised 115 respondents; and the study findings were presented in tables and figures. The results were summarised as per the objectives:

The first objective was to students' opinion on clinical training at KeMU. This study found that there is a significant relationship between perceptions of clinical training and clinical placements, mentorship, and supervision at p = 0.034, p = 0.043, and p = 0.000, respectively. Thus, nurse educators need to put more emphasis on clinical placement, mentorship, and supervision during clinical training. This will not only improve the students' perception but also improve clinical training.

This study identified the challenges experienced by the RN-BScN students. The

challenges identified by respondents include inadequate resources; curriculum challenges (lack of practise in skills laboratory; lack of placements of students in critical placement units; inadequate training on emerging and re-emerging diseases); lack of support from hospital staff; and personal financial challenges (burn-out; family needs). It is important to note that the RN-BScN students are different from the direct entry students. Therefore, they have unique challenges. Nurse educators need to identify different methods and approaches to handle them while in clinical placement. They should be handled differently from the direct entry students.

This study identified the following areas for improvement: the need for adequate supervision; improvement of the curriculum (to include practical hours in the clinical skills laboratory; incorporate critical placement areas; and incorporate a unit on emerging and re-emerging diseases); effective communication; and provision of sufficient resources in the clinical area. It may be impossible to meet these suggestions. However, institutions can collaborate with clinical placement sites and devise ways of improving clinical training.

5.3 Conclusion

Study findings showed that the RN-BScN students regarded clinical placements, mentorship, and supervision as critical areas in clinical training. Consequently, all these components should be observed when selecting the clinical placements. The institution should identify a conducive learning environment, develop mentorship and preceptorship programs, and ensure adequate supervision by university lecturers and clinical instructors by employing more clinical instructors.

Unlike direct entry students, upgrading RN-BScN students face unique challenges during clinical placements. This study identified challenges encountered by the RN-BScN students' inadequate resources, inadequate supervision, curriculum challenges, and lack of support by hospital staff. This finding has identified the dearth of incorporating student views into curriculum reviews. Also, clinical placement sites and institutions need to work together to come up with ways to give students resources while they are in clinical placements. There also needs to be good communication between university and hospital staff to build more support, and working students need to be able to have flexible clinical placement schedules.

On ways of improving training, this study concludes that the curriculum needs to be reviewed to incorporate clinical skills laboratory hours experience, review the clinical hours and placements, and incorporate a unit on emerging and re-emerging diseases.

5.4 Recommendations

5.4.1 Recommendations from Research Findings

Findings indicate that students had inadequate supervision due to unavailability of nurse educators in the clinical placement sites. Therefore, this study recommends that training institutions employ more clinical instructors to aid in the clinical supervision of students in the clinical area and increase the clinical visits of nurse educators for effective clinical supervision. They should also identify and recruit mentors/preceptors in the clinical placement sites who should be trained and supported for effective clinical training.

Students addressed the need to improve the RN-BScN curriculum by increasing clinical laboratory practise hours, allocating students in critical placement areas such as the Intensive Care Unit (ICU), Gender-Based Violence Centres, renal placements, oncology and palliative placements, and reinforcing knowledge of emerging and remerging diseases. Thus, this study recommends the need to review the RN-BScN curriculum to include clinical placements such as the Intensive Care Unit, Gender Based Violence Centre, renal, oncology, and palliative placements.

Finally, this study recommends increased collaboration with the placement institutions through clear communication with the placement institutions to inform them of the expectations of students' placements before placements and to discuss how resources can be provided to students to foster learning.

This study found that there was a dearth in the use of EBP and a lack of resources in clinical placements. Thus, this study's recommendations to placement institutions are to incorporate evidence-based research findings and critical thinking skills into nursing practise and also to devise ways of providing the required resources to students on attachment.

To the Nursing Council of Kenya, this study recommends revising the RN-BSc Nursing syllabus to incorporate clinical placement hours for Intensive Care Unit (ICU), Gender-Based Violence Centres, renal placements, oncology and palliative placements in all clinical placement sites. To the Nursing Council of Kenya, this study recommends revising the RN-BSc Nursing syllabus to incorporate clinical placement hours for Intensive Care Unit (ICU), Gender-Based Violence Centres, renal

placements, oncology and palliative placements in all clinical placement sites. This is based on students' feedback.

5.4.2 Recommendations for Further Research

Further research is needed to determine:

- a. Clinical placement views on clinical training from the experts nurses, and nurse educators
- b. Further research on clinical placement training with the use of observation as
 a data collection tool to get an objective finding

REFERENCES

- Aggarwal, R., & Ranganathan, P. (2019). Study designs: Part 2 Descriptive studies. *Perspectives in Clinical Research*, 10(1), 34. https://doi.org/10.4103/picr.picr_154_18
- Allari R., & Farag M. (2017). Nursing students; expectations regarding clinical training: A qualitative study. *International Journal of Nursing Science*, 7(3), 63 70. https://www.semanticscholar.org/paper/Nursing-Students%E2%80%99-Expectations-Regarding-Clinical-A-Allari-Farag/610f986417ab321b8be62c3f35c9fc364d69bb52
- Alshahrani, Y., Cusack, L., & Rasmussen, P. (2018, October). Undergraduate nursing students' strategies for coping with their first clinical placement: Descriptive survey study. *Nurse Education Today*, 69, 104–108. https://doi.org/10.1016/j.nedt.2018.07.005
- Amoo, S. A., Aderoju, Y. B. G., Sarfo-Walters, R., Doe, P. F., Okantey, C., Boso, C. M., Abraham, S. A., Druye, A. A., & Ebu Enyan, N. I. (2022, April 18). Nursing students' perception of clinical teaching and learning in Ghana: A descriptive qualitative study. *Nursing Research and Practice*, 2022, 1–9. https://doi.org/10.1155/2022/7222196
- Andrade, C. (2020, January). Sample Size and its Importance in Research. *Indian Journal of Psychological Medicine*, 42(1), 102–103. https://doi.org/10.4103/ijpsym.ijpsym_504_19.
- Atakro, C. A., Armah, E., Menlah, A., Garti, I., Addo, S. B., Adatara, P., & Boni, G. S. (2019, January 14). Clinical placement experiences by undergraduate nursing students in selected teaching hospitals in Ghana. *BMC Nursing*, *18*, Article 1. https://doi.org/10.1186/s12912-018-0325-8
- Baker, C., Cary, A. H., & Da Conceicao Bento, M. (2021). Global standards for professional nursing education: The time is now. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, *37*(1), 86–92. https://doi.org/10.1016/j.profnurs.2020.10.001
- Beiranvand, S., Khan Kermanshahi, S. M., & Memarian, R. (2021). Nursing instructors' clinical education competencies: An integrated review. *The Journal of the Pakistan Medical Association*, 71(5), 1458–1466. https://doi.org/10.47391/JPMA.089
- Blackman, I. R., & Giles, T. M. (2017). Can nursing students practice what is preached? Factors impacting graduating nurses' abilities and achievement to apply evidence-based practices. *Worldviews on Evidence-Based Nursing*, 14(2), 108–117. https://doi.org/10.1111/WVN.12205
- Bøe, S. V., & Debesay, J. (2021). The learning environment of student nurses during clinical placement: A qualitative case study of a student-dense ward. *SAGE Open Nursing*, 7,1-10. https://doi.org/10.1177/23779608211052357

- Brown, D., & Sivahop, J. N. (2017). Challenges of clinical education. *The Journal of Physician Assistant Education*, 28(Suppl 1), S28–S32. https://doi.org/10.1097/JPA.0000000000000146
- Butterworth T (2022) What is clinical supervision and how can it be delivered in practice? *Nursing Times*, *118*(2), 20-22. https://www.nursingtimes.net/roles/nurse-managers/what-is-clinical-supervision-and-how-can-it-be-delivered-in-practice-17-01-2022/
- Carolan, C., Davies, C. L., Crookes, P., McGhee, S., & Roxburgh, M. (2020). COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education. *Nurse Education in Practice*, 46, Article 102807 https://doi.org/10.1016/j.nepr.2020.102807.
- Chan, A. W., Tang, F. W., Choi, K. C., Liu, T., & Taylor-Piliae, R. E. (2018, September). Clinical learning experiences of nursing students using an innovative clinical partnership model: A non-randomized controlled trial. *Nurse Education Today*, 68, 121–127. https://doi.org/10.1016/j.nedt.2018.06.001.
- Collier A. D. (2018). Characteristics of an effective nursing clinical instructor: The state of the science. *Journal of Clinical Nursing*, 27(1-2), 363–374. https://doi.org/10.1111/jocn.13931
- Cooper, S., Cant, R., Waters, D., Luders, E., Henderson, A., Willetts, G., Tower, M., Reid-Searl, K., Ryan, C., & Hood, K. (2020). Measuring the quality of nursing clinical placements and the development of the Placement Evaluation Tool (PET) in a mixed methods co-design project. *BMC Nursing*, 19(1), 1–10. https://doi.org/10.1186/S12912-020-00491-1/TABLES/5
- Curtis, K., Fry, M., Shaban, R. Z., & Considine, J. (2017). Translating research findings to clinical nursing practice. *Journal of Clinical Nursing*, 26(5-6), 862–872. https://doi.org/10.1111/jocn.13586
- Davidson, L. (2022, May 16). *Kolb's Learning Cycle + Practical Example [Complete Guide]*. Emozzy. https://emozzy.com/kolbs-learning-cycle/
- Donough, G., & Heever, V. M. (2018). Undergraduate nursing students' experience of clinical supervision. *Curationis*, 41(1), e1–e8. https://doi.org/10.4102/curationis.v41i1.1833
- Driscoll, J., Stacey, G., Harrison-Dening, K., Boyd, C., & Shaw, T. (2019, April 26). Enhancing the quality of clinical supervision in nursing practice. *Nursing Standard*, 34(5), 43–50. https://doi.org/10.7748/ns.2019.e11228
- Ekstedt, M., Lindblad, M., & Löfmark, A. (2019, October 30). Nursing students' perception of the clinical learning environment and supervision in relation to two different supervision models a comparative cross-sectional study. *BMC Nursing*, *18*(1). https://doi.org/10.1186/s12912-019-0375-6
- Erlam, G., Smythe, L., & Wright-St Clair, V. (2018). Action research and millennials: Improving pedagogical approaches to encourage critical thinking. *Nurse Education Today*, 61, 140–145. https://doi.org/10.1016/j.nedt.2017.11.023

- Eweida, R. S., Rashwan, Z. I., Desoky, G. M., & Khonji, L. M. (2020, November). Mental strain and changes in psychological health hub among intern-nursing students at pediatric and medical-surgical units amid ambience of COVID-19 pandemic: A comprehensive survey. *Nurse Education in Practice*, 49, 1-8.
- Farzi, S., & Shahriari, M. (2018). Exploring the challenges of clinical education in nursing and strategies to improve it: A qualitative study. *Journal Of Education and Health Promotion*, 7, 115. https://doi.org/10.4103/jehp.jehp 169 17
- Fewster-Thuente, L., & Batteson, T. J. (2018). Kolb's experiential learning theory as a theoretical underpinning for interprofessional education. *Journal of Allied Health*, 47(1), 3–8. https://pubmed.ncbi.nlm.nih.gov/29504014/
- Fiset, V. J., Graham, I. D., & Davies, B. L. (2017). Evidence-based practice in clinical nursing education: A scoping review. *Journal of Nursing Education*, *56*(9), 534–541. https://doi.org/10.3928/01484834-20170817-04
- Flott, E. A., & Linden, L. (2016). The clinical learning environment in nursing education: A concept analysis. *Journal of Advanced Nursing*, 72(3), 501–513. https://doi.org/10.1111/jan.12861
- Fukada, M. (2018). Nursing competency: Definition, structure and development. *Yonago Acta Medica*, 61(1), 001–007. https://doi.org/10.33160/yam.2018.03.001
- Gemuhay, H. M., Kalolo, A., Mirisho, R., Chipwaza, B., & Nyangena, E. (2019). Factors affecting performance in clinical practice among preservice diploma nursing students in northern Tanzania. *Nursing Research and Practice*, 2019, Article 3453085. https://doi.org/10.1155/2019/3453085
- Ghrayeb, F. A., Amro, N. R. N., Rahseed, O., Yagi, H., Amro, R., & Amro, B. (2017). Knowledge and attitude of basic life support (BLS) among school teachers in Hebron, Palestine. *International Journal of Research in Medical Sciences*, *5*(6), 2477–2482. https://doi.org/10.18203/2320-6012.ijrms20172432
- Grant-Smith, D., & De Zwaan, L. (2019). Don't spend, eat less, save more: Responses to the financial stress experienced by nursing students during unpaid clinical placements. *Nurse Education in Practice*, *35*, 1–6. https://doi.org/10.1016/j.nepr.2018.12.005.
- Greenway, K., Butt, G., & Walthall, H. (2019, January). What is a theory-practice gap? An exploration of the concept. *Nurse Education in Practice*, *34*, 1–6. https://doi.org/10.1016/j.nepr.2018.10.005.
- Günay, U., & Kılınç, G. (2018). The transfer of theoretical knowledge to clinical practice by nursing students and the difficulties they experience: A qualitative study. *Nurse Education Today*, 65, 81–86. https://doi.org/10.1016/j.nedt.2018.02.031
- Hardavella, G., Aamli-Gaagnat, A., Saad, N., Rousalova, I., & Sreter, K. B. (2017). How to give and receive feedback effectively. *Breathe*, *13*(4), 327–333. https://doi.org/10.1183/20734735.009917

- Health Careers (2017, September 26). *Clinical placements for nursing students*. https://www.healthcareers.nhs.uk/explore-roles/doctors/medical-school/clinical-placementsmedical-students
- Health-e News. (2014, November 12). *Report: National Department of Health Annual Report* 2013-14. https://health-e.org.za/2014/11/13/report-national-department-health-annual-report-2013-14/
- Horntvedt, M. T., Nordsteien, A., Fermann, T., & Severinsson, E. (2018). Strategies for teaching evidence-based practice in nursing education: A thematic literature review. *BMC Medical Education*, *18*(1), 1–11. https://doi.org/10.1186/S12909-018-1278-Z/TABLES/3
- Houghton, C., Meskell, P., Delaney, H., Smalle, M., Glenton, C., Booth, A., Chan, X. H. S., Devane, D., & Biesty, L. M. (2020, April 21). Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*, 4, Article CD013582 https://doi.org/10.1002/14651858.cd013582
- Iheduru-Anderson, K. (2020, October 3). Reflections on the lived experience of working with limited personal protective equipment during the COVID-19 crisis. *Nursing Inquiry*, 28(1), e12382 https://doi.org/10.1111/nin.12382
- Immonen, K., Oikarainen, A., Tomietto, M., Kääriäinen, M., Tuomikoski, A. M., Kaučič, B. M., Filej, B., Riklikiene, O., Flores Vizcaya-Moreno, M., Perez-Cañaveras, R. M., De Raeve, P., & Mikkonen, K. (2019, December). Assessment of nursing students' competence in clinical practice: A systematic review of reviews. *International Journal of Nursing Studies*, 100, Article 103414 https://doi.org/10.1016/j.ijnurstu.2019.103414
- Jackson S., & Touw M. (2018). Perceptions of nursing students pre/post behavioral mental health clinical. *Ann Nursing Practice*, *5*(3), 1103. https://www.jscimedcentral.com/Nursing/nursing-5-1103.pdf
- Jamshidi, N., Molazem, Z., Sharif, F., Torabizadeh, C., & Najafi Kalyani, M. (2016). The challenges of nursing students in the clinical learning environment: A qualitative study. *The Scientific World Journal*, 2016, Article 1846178. https://doi.org/10.1155/2016/1846178.
- Kalyani N., Jamshidi M., Molazem N., Torabizadeh Z., & Sharif F. (2019). How do nursing students experience the clinical learning environment and respond to their experiences? A qualitative study. *BMJ Open*, *9*(7), e028052. https://doi.org/10.1136/bmjopen-2018-028052.
- Kamphinda, S., & Chilemba, E.B. (2019). Clinical supervision and support: Perspectives of undergraduate nursing students on their clinical learning environment in Malawi. *Curationis*, 42(1), e1-e10 https://doi.org/10.4102/curationis.v42i1.1812.

- Kaphagawani, N. C., & Useh, U. (2017). Analysis of nursing students learning experiences in clinical practice: Literature review. *Studies on Ethno-Medicine*, 7(3), 181–185. https://doi.org/10.1080/09735070.2013.11886459
- King, C., Edlington, T., & Williams, B. (2020). The "ideal" clinical supervision environment in nursing and allied health. *Journal of Multidisciplinary Healthcare*, *13*(1), 187–196. https://doi.org/10.2147/JMDH.S239559
- Kolb, D. & Fry, R. (1974). *Toward an applied theory of experiential learning*. MIT Alfred P. Sloan School of Management.
- Kolb, D. (1984). Experiential learning: Experience as the source of learning and development (Vol. 1). Prentice-Hall.
- Landeen, J., Carr, D., Culver, K., Martin, L., Matthew-Maich, N., Noesgaard, C., & Beney-Gadsby, L. (2016). The impact of curricular changes on BSCN students' clinical learning outcomes. *Nurse Education in Practice*, *21*(1), 51–58. https://doi.org/10.1016/j.nepr.2016.09.010
- Laugaland, K., Kaldestad, K., Espeland, E., McCormack, B., Akerjordet, K., & Aase, I. (2021, September 6). Nursing students' experience with clinical placement in nursing homes: A focus group study. *BMC Nursing*, 20(1), 1-13. https://doi.org/10.1186/s12912-021-00690-4
- Mahasneh, D., Shoqirat, N., Alsaraireh, A., Singh, C., & Thorpe, L. (2021). From learning on mannequins to practicing on patients: Nursing students' first-time experience of clinical placement in Jordan. *SAGE Open Nursing*, 21, 7. https://doi.org/10.1177/23779608211004298
- Maria, C. (2022, October 12). *Peer Learning: Benefits and Best Practices*. TPR Teaching. Retrieved 23 October 2022, from https://www.tprteaching.com/peer-learning/
- Mbakaya, B. C., Kalembo, F. W., Zgambo, M., Konyani, A., Lungu, F., Tveit, B., Kaasen, A., Simango, M., & Bvumbwe, T. (2020). Nursing and midwifery students' experiences and perception of their clinical learning environment in Malawi: a mixed-method study. *BMC Nursing*, 19(1), 87-101. https://doi.org/10.1186/S12912-020-00480-4
- Mburu, S. W. (2015). Evaluation of the clinical learning experiences among undergraduate nursing students at the University of Nairobi school of nursing [Masters thesis, University of Nairobi]. http://erepository.uonbi.ac.ke/handle/11295/95101
- McCutcheon, K., O'Halloran, P., & Lohan, M. (2018, June). Online learning versus blended learning of clinical supervisee skills with pre-registration nursing students: A randomised controlled trial. *International Journal of Nursing Studies*, 82(6), 30–39. https://doi.org/10.1016/j.ijnurstu.2018.02.005
- Minton, C., & Birks, M. (2019). "You can't escape it": Bullying experiences of New Zealand nursing students on clinical placement. *Nurse Education Today*, 77(6), 12–17. https://doi.org/10.1016/j.nedt.2019.03.002

- Mirzaei, K., Yazdankhahfard, M., & Ravanipour, M. (2020). The gap in the clinical learning environment: The viewpoints of nursing students. *Journal of Education and Health Promotion*, 9(1), 311. https://doi.org/10.4103/jehp.jehp_438_20
- Moyimane, M. B., Matlala, S. F., & Kekana, M. P. (2017). Experiences of nurses on the critical shortage of medical equipment at a rural district hospital in South Africa: A qualitative study. *The Pan African Medical Journal*, 28, 100-108. https://doi.org/10.11604/pamj.2017.28.100.11641
- Mugenda, O., & Mugenda, A. (2003). Research methods quantitative and qualitative approaches. Acts Press.
- Muthathi, I. S., Thurling, C. H., & Armstrong, S. J. (2017). Through the eyes of the student: best practices in clinical facilitation. *Curationis*, 40(1), e1–e8. https://doi.org/10.4102/curationis.v40i1.1787
- Nakagawa, H., & Sasai, H. (2021). Nursing students' practicums during the COVID-19 crisis and the effect on infection-prevention behavior in students: A mixed-method approach. *Medicina*, *57*(12), 1354-1367. https://doi.org/10.3390/medicina57121354
- Nordquist, J., Hall, J., Caverzagie, K., Snell, L., Chan, M. K., Thoma, B., Razack, S., & Philibert, I. (2019, March 17). The clinical learning environment. *Medical Teacher*, 41(4), 366–372. https://doi.org/10.1080/0142159x.2019.1566601
- Pålsson, Y., Mårtensson, G., Swenne, C. L., Ädel, E., & Engström, M. (2017). A peer learning intervention for nursing students in clinical practice education: A quasi-experimental study. *Nurse Education Today*, *51*(4), 81–87. https://doi.org/10.1016/j.nedt.2017.01.011
- Phuma-Ngaiyaye, E., Bvumbwe, T., & Chipeta, M. C. (2017). Using preceptors to improve nursing students' clinical learning outcomes: A Malawian students' perspective. *International Journal of Nursing Sciences*, 4(2), 164–168. https://doi.org/10.1016/j.ijnss.2017.03.001
- Pinehas, L. N., Mulenga, E., & Amadhila, J. (2017, March 14). Factors that hinder the academic performance of the nursing students who registered as first years in 2010 at the University of Namibia (UNAM), Oshakati Campus in Oshana, Namibia. *Journal of Nursing Education and Practice*, 7(8), 63-71 https://doi.org/10.5430/jnep.v7n8p63
- Putra, K. R., Hany, A., & Ariningpraja, R. T., (2021). The effect of clinical learning environment on nursing student satisfaction in East Java Province. *Indonesian Nursing Journal of Education and Clinic (INJEC)*, 6(1), 64-71. http://dx.doi.org/10.24990/injec.v6i1.393
- Rebeiro, G., Wilson, D., & Fuller, S. (2020, November 1). *Fundamentals of Nursing: Clinical Skills Workbook* (4th ed.). Mosby Australia. https://www.elsevier.com/books/fundamentals-of-nursing-clinical-skills-workbook/rebeiro/978-0-7295-4343-9.

- Rezakhani M. H., Aghamohammadi, V., Jafari, M., Absalan, M., & Nasiri, K. (2020, April). Challenges Faced by Nursing Students to Work with Nursing Personnel: A Qualitative Study. *Advances in Medical Education and Practice*, *11*, 313–319. https://doi.org/10.2147/amep.s246901
- Ross, P. (2020, November 12). *World Health Organisation: Nurse Educator Core Competencies*. Nursing Education Network. Retrieved 23 October 2022, from https://nursingeducationnetwork.net/2017/08/02/world-health-organisation-nurse-educator-core-competencies/
- Saxon, P. J. (2021, January 19). *Kolb's experiential learning cycle: In theory and in practice*. GiLE Foundation. https://www.gile-edu.org/articles/career-planning/kolbs-experiential-learning-cycle-in-theory-and-in-practice/
- Sezer H., (2018). How should clinical education be in nursing education? *Journal of Nursing Research and Practice*, 2(1), 15. https://www.pulsus.com/scholarly-articles/how-should-clinical-education-be-in-nursing-education.pdf
- Soriano G., Aquino G. (2017). Characteristics of a good clinical teacher as perceived by nursing students and faculty members in a Philippine university college of nursing. *International Journal of Nursing Science*, 7(4), 96-101. https://doi:10.5923/j.nursing.20170704.04
- Spence D., Zambas S., Mannix J., Jackson D., & Neville S. (2019). Challenges to the provision of clinical education in nursing. *Contemporary Nurse*, *55*(4-5), 458-467. https://doi: 10.1080/10376178.2019.1606722
- Struksnes, S., & Engelien, R. I. (2016). Nursing students' conception of clinical skills training before and after their first clinical placement: A quantitative, evaluative study. *Nurse Education in Practice*, *16*(1), 125–132. https://doi.org/10.1016/j.nepr.2015.10.009
- Sweet, L., & Broadbent, J. (2017). Nursing students' perceptions of the qualities of a clinical facilitator that enhance learning. *Nurse Education in Practice*, 22(1), 30–36. https://doi.org/10.1016/J.NEPR.2016.11.007
- Taber, K. S. (2017). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2
- Thomas, C. M., & Kellgren, M. (2017). Benner's novice to expert model: An application for simulation facilitators. *Nursing Science Quarterly*, *30*(3), 227–234. https://doi.org/10.1177/0894318417708410
- Thomas, L. (2022, July 21). *Cross-sectional study Definition, uses & examples*. Scribbr. https://www.scribbr.com/methodology/cross-sectional-study/
- Tomietto, M. (2018). A good clinical learning environment as an organizational challenge. In M. Saarikoski & C. Strandell-Laine (Eds.), *The CLES-Scale: An*

- *evaluation tool for healthcare education* (pp. 57–70). Springer International Publishing. https://doi.org/10.1007/978-3-319-63649-8 6
- Ulenaers, D., Grosemans, J., Schrooten, W., & Bergs, J. (2021). Clinical placement experience of nursing students during the COVID-19 pandemic: A cross-sectional study. *Nurse Education Today*, 99(4), 104746. https://doi.org/10.1016/J.NEDT.2021.104746
- Ülker, T., & Korkmaz, F. (2017, July 24-25). Collaboration between Health Care Institutions and Nursing Schools on Clinical Education.[conference session] *5th Annual Worldwide Nursing Conference (WNC 2017)*. Singapore, Central Region, Singapore https://doi.org/10.5176/2315-4330 wnc17.68
- Vuckovic, V., & Landgren, K. (2020, August 18). Peer learning in clinical placements in psychiatry for undergraduate nursing students: Preceptors and students' perspective. *Nursing Open*, 8(1), 54–62. https://doi.org/10.1002/nop2.602
- Weurlander, M., Lönn, A., Seeberger, A., Broberger, E., Hult, H., & Wernerson, A. (2018). How do medical and nursing students experience emotional challenges during clinical placements? *International journal of medical education*, 9, 74–82. https://doi.org/10.5116/ijme.5a88.1f80
- Wolf, L. A., Perhats, C., Delao, A., & Martinovich, Z. (2017). The effect of reported sleep, perceived fatigue, and sleepiness on cognitive performance in a sample of emergency nurses. *Journal of Nursing Administration*, 47(1), 41-49. https://doi.org/10.1097/NNA.0000000000000435
- World Health Organization (2019, September 14). *Patient safety*. Retrieved October 20, 2022, from https://www.who.int/news-room/fact-sheets/detail/patient-safety
- World Population Review (n.d). *Nairobi Population 2022 (Demographics, Maps, Graphs)*. (n.d.). Retrieved October 20, 2022, from https://worldpopulationreview.com/world-cities/nairobi-population
- Ziba, F. A., Yakong, V. N., & Ali, Z. (2021, January 7). Clinical learning environment of nursing and midwifery students in Ghana. *BMC Nursing*, 20(1), 14-21. https://doi.org/10.1186/s12912-020-00533-8

APPENDICES

Appendix 1: Informed consent

My name is Doris Jeptalam Tuitoek, I am a Masters student from Kenya Methodist University. I am conducting a study on RN-BSN students' perception towards clinical re-evaluation among Kenya Methodist University upgrade students. The information was used by the Ministry of Education and the Nursing Council of Kenya for planning and restructuring the upgrade curriculum to improve the quality of teaching thus develop an effective clinical teaching and supervision strategy in nursing education.

Procedures to be followed

Participation in this study will require you to fill out a questionnaire provided to you during time of study. Please remember the participation in the study is voluntary and you have the right to refuse to participate in this study at any point of the study there was no consequences to it and you can ask questions related to the study at any time.

Discomforts and Risks

Some of the questions was asked are on intimate subject and may be embarrassing or make you uncomfortable. If this happens, you may refuse to answer these questions if you so choose.

Benefits

If you participate in this study you will help us establish better ways of improving nursing clinical experience

Confidentiality

The interview was conducted in a private room within the university campus. Your name will not be recorded on the questionnaire, coding of the tool was done instead

Participant's statement

The above information regarding my participation	n in the study is clear to me. I have
been given a chance to ask questions and my qu	estions have been answered to my
satisfaction. My participation in this study is entir	ely voluntary. I understand that my
records were kept private and that I can leave the s	study at any time.
Name of the Participant	
Signature or Thumbprint	Date
<u>Investigators statement</u>	
I, the undersigned, have explained to the voluntee	er about the study the procedures to
be followed in the study, the risks and benefits inv	rolved
Name	of
Interviewer	
Signature or Thumbprint	Date

Appendix 2: Self-Administered Questionnaire

Questionnaire Number	Int	erview Date//2019
Interviewer Code		
A. SOCIO	D-DEMOGRAPH	ICS
1. What is your age bracket?	(Tick where a	applicable)
[(10-19)	(20-29)	(30-39)
<u>(40 - 49)</u>	<u>[</u> (50 - 59)	other
2. What is your Marital Status	(tick where Applic	cable)
Single		
Married Married		
Divorced/Separated		
Widowed		
Others (Specify)		
3. What is your Religion?		
Christian	Muslim	Hindu
Pagan	Others (specify	y)
4. Years of experience as a regis	stered nurse:	
\bigcirc 0 – < 2 years		☐ 5 − 10 years
2 - < 5 years		Above 10 years
5. Years after completion of dip	loma in nursing:	
\bigcirc 0 – < 2 years		☐ 5 − 10 years
2 - < 5 years		Above 10 years

6.	Have had an a	dditional training/specialised training in any area:
		Yes No
	a. If yes,	what is your area of specialization
		ICU/NICU
		Reproductive
		Psychiatry
		Paediatric
	b. If yes,	which certificate did you attain after the specialised training
		Certificate
		Diploma
		Higher Diploma
		Others:

B. VIEWS ON CLINICAL PLACEMENTS

Tick where appropriate of how satisfied or dissatisfied you are with the clinical placements where 1 – very dissatisfied, 2 – Dissatisfied, 3 – Neither satisfied or dissatisfied, 4 – Satisfied, 5 – very satisfied

S/N	Views on clinical placement	Level of Agreement students		by by		
		1	2	3	4	5
1.	Clinical practice settings provided a positive learning environment					
2.	Clinical settings developed new knowledge, skills and practice					

3.	The clinical placements provided an			
	opportunity to meet the clinical			
	objectives			
4.	Clinical objectives were always met at			
	each clinical placement			
5.	Clinical skills learned were relevant to			
	current nursing practice			
6.	Clinical placements provided opportunity			
	to transfer theory into practice			
7.	Variety of clinical experiences and skills			
	were learned during clinical training			
8.	Clinical placements provided opportunity			
	to apply critical thinking skills during			
	problem solving			
9.	Research culture was encouraged during			
	training			
10.	Hospital staff provided adequate support			
	to students during training			
11.	Appropriate feedback was always given			
	by hospital staff during clinical training			
12.	There were adequate opportunities for			
	hands-on practice			

C. VIEWS ON CLINICAL TRAINING AND CLINICAL EVALUATION

Tick where appropriate of how satisfied or dissatisfied you are with the clinical placements where 1- very dissatisfied, 2- Dissatisfied, 3- Neither satisfied or dissatisfied, 4- Satisfied, 5- very satisfied

S/N	Qualities of Clinical Educators	Level of Agreement by students				
		1	2	3	4	5
1.	Emphasis on clinical skills was given					
	similar to knowledge in class					
2.	Procedure manuals were always					
	available to guide students					
3.	Clinical objectives were always shared					
	prior to clinical placement					
4.	Nursing lecturers were always					
	involved in clinical teaching					
5.	Nursing lecturers had adequate					
	professional experience					
6.	Nursing lecturers displayed					
	competence in demonstrating					
	procedures					
7.	Nursing lecturers had good					
	interpersonal skills					
8.	Clinical instructors displayed adequate					
	professional experience					
9.	Clinical instructors were always					
	involved in clinical teaching					
10.	Clinical instructors had adequate					
	professional experience					
11.	Clinical instructors displayed					
	competence in demonstrating					
	procedures					
12.	Clinical instructors had good					
	interpersonal skills					
13.	Adequate supervision was given					
	during clinical practice					
	I .	·				

14. Appropriate feedback was always given by clinical educators during clinical training 15. Methods used in clinical training was adequate 16. Clinical placement evaluation was always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements 1. What are the challenges faced during clinical placem						
clinical training 15. Methods used in clinical training was adequate 16. Clinical placement evaluation was always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements	14.	Appropriate feedback was always				
15. Methods used in clinical training was adequate 16. Clinical placement evaluation was always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements		given by clinical educators during				
adequate 16. Clinical placement evaluation was always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements		clinical training				
16. Clinical placement evaluation was always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements	15.	Methods used in clinical training was				
always objective 17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements		adequate				
17. Clinical placement evaluation feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements	16.	Clinical placement evaluation was				
feedback was immediate 18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements		always objective				
18. Clinical placement evaluation was crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements	17.	Clinical placement evaluation				
crucial for learning 19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements		feedback was immediate				
19. Clinical evaluators were equipped with knowledge and skills D. Clinical Training Challenges and Improvements	18.	Clinical placement evaluation was				
knowledge and skills D. Clinical Training Challenges and Improvements		crucial for learning				
D. Clinical Training Challenges and Improvements	19.	Clinical evaluators were equipped with				
		knowledge and skills				
				clinical	plac	ements
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2. What can be done to improve clinical teaching _____?

3.	What are the benefits of upgrading?
•	- The state of the

Appendix 3: Focus Group Discussion Guide

- 1. What is your view on clinical training?
- 2. In the previous clinical placements, were you able to integrate theory into practice?
- 3. Do you have any suggestions on how to improve clinical teaching in the clinical placements?
- 4. Do you have mentorship or preceptorship program in the clinical placements?
- 5. What are the challenges faced in clinical placement?
- 6. What can be done to improve clinical training?

Appendix 4 Location of the study



Appendix 5: Approval from Directorate of Postgraduate Studies



KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya Tel: 254-064-30301/31229/30367/31171 Fax: 254-64-30162 Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

February 26, 2021

Commission Secretary, National Commission for Science, Technology and Innovations, P.O. Box 30623-00100, NAIROBI.

Dear sir/ Madam,

RE: DORIS JEPTALAM TUITOEK (MSN-3-0735-1/2017)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, Department of Nursing undertaking a Degree of Master of science in Nursing. She is conducting research on 'Perceptions of In-Service Nursing students on clinical training at Kenya Methodist University, Nairobi Campus'.

We confirm that her Research proposal has been defended and approved by the University.

In this regard, we are requesting your office to issue a permit to enable her collect data for Her research.

Any assistance accorded to her will be appreciated.

Thank you.

Dr. John Muchiri, PHD.
Director Postgraduate Studies

Appendix 6: Ethical clearance



KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA TEL: 254-064-30301/31229/30367/31171 FAX: 254-64-30162 EMAIL: serc@kemu.ac.ke

February 26, 2021

KeMU/SERC/MSN/6/2021

Doris Jeptalam Tuitoek Kenya Methodist University

Dear Doris,

SUBJECT: PERCEPTIONS OF IN-SERVICE NURSING STUDENTS ON CLINICAL TRAINING AT KENYA METHODIST UNIVERSITY, NAIROBI CAMPUS

This is to inform you that Kenya Methodist University Scientific Ethics and Review Committee has reviewed and approved your above research proposal. Your application approval number is KeMU/SERC/MSN/6/2021. The approval period is 26th February 2021 – 26th February 2022.

This approval is subject to compliance with the following requirements

- Only approved documents including (informed consents, study instruments, MTA) will be used.
- II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Scientific Ethics and Review committee.
- III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU SERC within 72 hours of notification.
- IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU SERC within 72 hours.

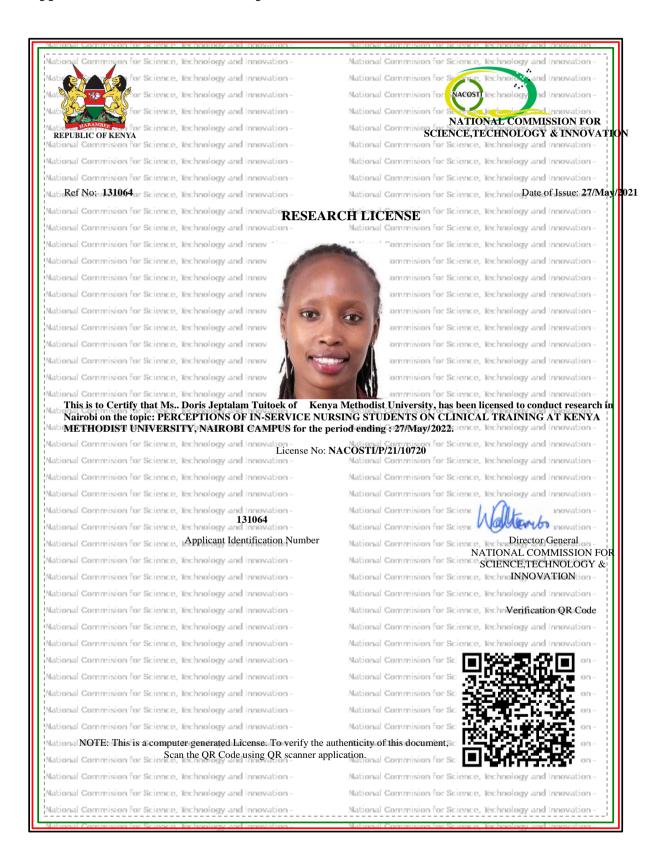
- V. Clearance for export of biological specimens must be obtained from relevant institutions.
- VI. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- VII. Submission of an executive summary report within 90 days upon completion of the study to KeMU SERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://oris.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely.

Dr. A. WAMACHI Chair, SERC

Appendix 7: NACOSTI research permit



THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

- 1. The License is valid for the proposed research, location and specified period
- 2. The License any rights thereunder are non-transferable
- 3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
- 4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
 5. The License does not give authority to transfer research materials
- 6. NACOSTI may monitor and evaluate the licensed research project
- 7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation off Waiyaki Way, Upper Kabete, P. O. Box 30623, 00100 Nairobi, KENYA Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077 Mobile: 0713 788 787 / 0735 404 245 E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke

Website: www.nacosti.go.ke

Appendix 8: Authorization to conduct research in KeMU Nairobi Campus



Kenya Methodist University

P. O Box 267 - 60200, Meru, Kenya, Tel: (+254-020) 2118423-7, 064-30301/31229 Email: info@kemu.ac.ke , Website: www.kemu.ac.ke

OFFICE OF THE VICE-CHANCELLOR

REF: KeMU/A/VC/GEN.EXT/1Q7/1/21

12th July 2021

Ms. Doris J. Tuitoek P. O. Box 14777 – 20100 NAKURU

Email: dorischeta@gmail.com

Dear Doris.

RE: AUTHORIZATION TO CONDUCT RESEARCH AT KEMU

Reference is made to the above subject matter.

Your request seeking authorization to collect data for your research titled, "Perceptions of In-Service Nursing Students on Clinical Training at Kenya Methodist University, Nairobi Campus" has been approved.

Please note that only approved data forms are to be used in the enrollment of participants with their individual consent. All consent forms signed by subjects and/or witnesses should be retained on file. Further, any substantial changes in the scope of your research from what is presently provided will require an approval from the University.

Please proceed as you have outlined in your proposal and share your findings with the University by sending a copy to the Director, Research innovation and Extension. If the terms are acceptable to you, please sign a copy of this letter and return it to the Directorate of Research, Innovation and Extension.

PROF. DAVID GICHOYA, Ph.D.

I, the undersigned hereby confirm acceptance of this offer and the conditions stated herein.